April 2009

CONSORTIUM ON
CHICAGO SCHOOL RESEARCH
AT THE UNIVERSITY OF CHICAGO
URBAN EDUCATION INSTITUTE
CCST

# From High School to the Future: Making Hard Work Pay Off

The Road to College for Students in CPS's Academically Advanced Programs



#### **Acknowledgements**

In the late winter of 2005, CCSR researchers asked students in 12 junior English classrooms to join a longitudinal study of students' experiences in making the transition to college. In three neighborhood high schools, we recruited students from three IB classrooms, three AP classrooms, and six regular English classes. We told students they were the experts who could help us understand what works, what needs to be improved, and how to make Chicago high schools do a better job of supporting students as they made the transition to college or work. We told students that they would not get any benefits from participating, but we asked them to join us in helping Chicago schools become better for their younger brothers and sisters and for all students who would come after them. In a testament to the character of CPS students, more than 85 percent of the recruited students volunteered to join the study-so many that we, unfortunately, could not include them all. For over three years, students gave up lunch breaks, talked to us about their experiences and plans, and continued to make time for us in their busy schedules after they had graduated. Their teachers allowed us to visit their classrooms, gave up free periods to be interviewed, and voluntarily filled out individual assessments of each student in our study. We are indebted to these students and teachers for the many hours of time they volunteered, as well as to the principals and staff of the high schools in which we worked who allowed this study to happen and supported it over two years. The students, teachers, and other school staff truly were the experts who guided our analysis and provided critical insights. In the end, we hope we have delivered on our promise to these students and have assembled their experiences and our analysis into a report that will assist CPS educators and policymakers in building effective systems that bridge the gap between students' college aspirations, their college access, and their college success.

Along the way, many individuals have helped shape this report and made our work possible. In addition to the report authors, all of the members of our research staff have contributed to this report, from interviewing students and teachers to observing classrooms, to helping lay the groundwork for qualitative and quantitative analysis, to shaping our understanding through impromptu discussions. We would like to thank project researchers Karen Roddie, Jamiliyah Gilliam, Desmond Patton, Amy Proger, Melanie LaForce, Elaine M. Allensworth, Jonah Deutsch, Ginger Stoker, Andy Brake, Macarena Correa, and Camille Farrington. We would also like to thank our research assistants and transcribers who were invaluable to our research, particularly Alissa Bolz, Liz Hogg, Manuel Barragán, Jessica Brown, Sara Budowsky, Kristin Buller, Trisha Curran, Michele Dubuisson, Kelly Gartland, Sarah Hooker, Sarah Idzik, Thomas Kelley-Kemple, Karen Kinsley, Emily Lundell, Melinda Magleby, Jocelyn Moore, Caryn Olsen, Amanda Posner, Sara Powers, Stacey Shin, Elizabeth Stolarczuk, Brandon Thorne, and Erica Zaklin.

The public informing staff at CCSR, particularly Tracy Dell'Angela and Marisol Mastrangelo, were instrumental in helping us edit and produce this report. We are indebted to the staff at the Chicago Public Schools who provided technical advice, data support, and analytical support and guidance throughout this research, particularly Greg Darnieder, Kelly Sparks, Sara Leven, Scott Beaudry, and Gudelia Lopez. We would especially like to thank Arne Duncan for his strong and consistent support of our work. We are also indebted to the CCSR directors for feedback, guidance, and support throughout all stages of this project, particularly John Easton, Penny Sebring, and Sue Sporte. Thanks also to the members of the CCSR Steering Committee for their comments and feedback, particularly Brian Spittle and Ruanda Garth McCullough. Thank you to CCSR staff member, Sara Stoelinga, for her technical read of the report.

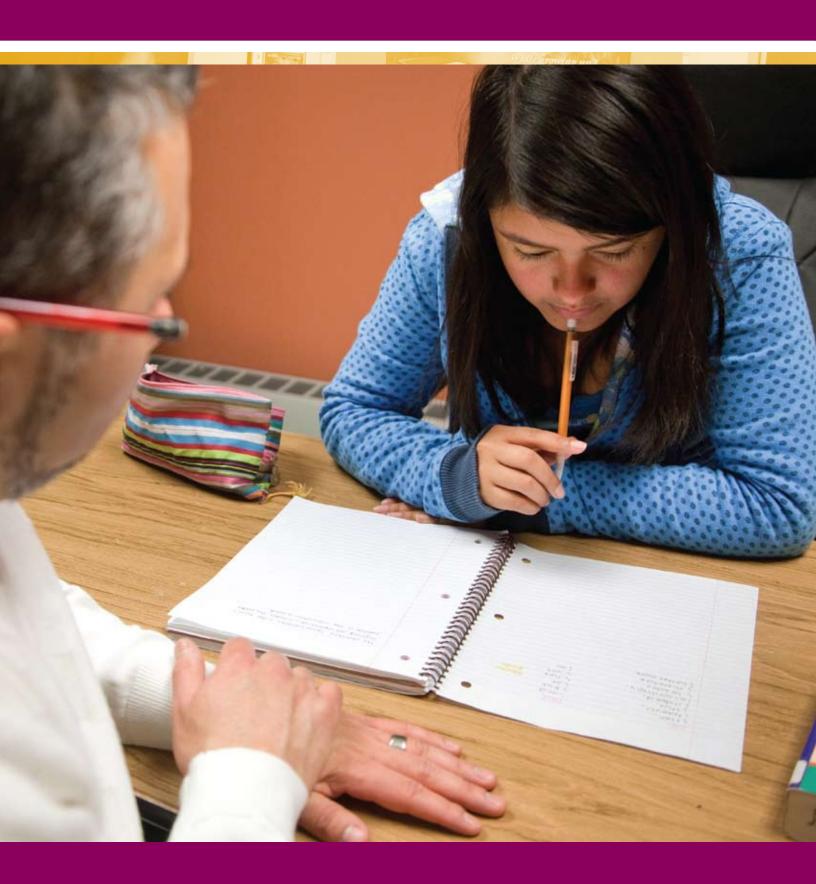
We would like to especially thank Sheri Ranis and Colleen Oliver at the Gates Foundation, who provided feedback and guidance on our analysis.

Finally, the administrative staff at the School of Social Service Administration—Keith Madderom, Beverly Mason, Gidget Ambuehl, Suzanne Fournier, Vanessa Taylor, Anita Balgopal Goodnight, John McDonald, John Adamczewski, and Sid Ulevicius—provided support for this work. SSA's staff always made us feel that our work was important and never made us feel that we were asking too much. We owe a special debt of gratitude to the staff of the Hyde Park and Ukrainian Village Subway Restaurants who made hundreds of lunches for us, took special orders, and helped us affordably deliver on the promise we made to provide students in our study with a tasty lunch to enjoy during their interviews.

This study is funded by grants from the Bill & Melinda Gates Foundation, the William T. Grant Foundation, and the Spencer Foundation.

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### **Executive Summary**

Education reform is increasingly focused on improving college access and success for high school graduates, particularly through the rigor of their coursework, and the Chicago Public Schools (CPS) has been on the forefront of this trend. Between 1999 and 2006, CPS opened five new selective enrollment high schools and expanded International Baccalaureate (IB) and Advanced Placement (AP) course offerings in neighborhood high schools. As we demonstrate in this report, most graduates from selective enrollment high schools and students who participate in a rigorous sequence of AP or IB courses attain the strong qualifications needed to gain access to more selective colleges.

Producing graduates with strong academic qualifications poses distinctive challenges, opportunities, and potential lessons for schools. If graduates from these academically advanced programs are to fully capitalize on the opportunity they have earned to enroll in more selective colleges, they will need to navigate a more complicated process of college search and admission. It is often assumed that the top CPS students do not have any problems translating their high school success into admission to top colleges. However, our previous report, *From High School to the Future: Potholes on the Road to College*, shows how qualifications and skills are not the only factors that shape college access; even CPS graduates with strong academic qualifications and high aspirations for college often struggle in application and search.

This report expands on the findings of our previous work on the importance of developing specialized supports for the college search and application process for highly qualified students. We focus on three groups of students: graduates from CPS's selective enrollment high schools, graduates from IB programs, and graduates who have taken a sequence of honors

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and AP courses in neighborhood high schools. This report presents a portrait of the demographic characteristics and college qualifications of students in these programs. We draw on data from the CPS postsecondary tracking system to examine the college enrollment of these students and compare the kinds of colleges students are qualified to attend to the kinds of colleges to which students apply and to which they ultimately enroll. Finally, we draw on both qualitative and quantitative analysis to identify five areas where academically advanced students in CPS-most of whom are also first-generation college students—face particular challenges as they negotiate the complicated and competitive college application process. This report is not intended to be a rigorous evaluation of the efficacy of selective enrollment schools, IB programs, or AP initiatives. Rather, it is intended to provide critical information that allows school staff and district administrators to assess their own efforts and discuss what it means to develop programs that prepare students to compete for admission to top colleges and universities.

This report focuses on a small group of programs and schools, but the lessons learned here have important implications for the future of high school reform in Chicago. The number of high-achieving elementary students has been growing, and the opening of new selective enrollment high schools has not kept up with demand. In addition, academically advanced programs in neighborhood high schools have remained small. While AP participation has expanded rapidly, few high schools engage their students in a rigorous sequence of AP and honors coursework that would give them an academic experience comparable to a selective enrollment school or IB program. Building rigorous academic programs is a central component of recent high school initiatives in Chicago. The hope is that, as these initiatives mature, there will be an expanding pool of highly qualified students, and, as a result, more and more students and schools will need to meet the challenges described in this report. Addressing these challenges faced by highly qualified students is critically important because these academically advanced programs could be models of practice in CPS and provide illuminating examples of what high-achieving students across the system can aspire to accomplish.

### **Key Findings**

 Students participating in academically advanced programs have higher incoming achievement test scores than the average CPS student, but they do not necessarily come from more advantaged communities or families.

Students in selective enrollment high schools have much higher eighth-grade test scores than students in IB and AP programs in neighborhood high schools. Thus, AP and IB programs seem to be filling an important gap in neighborhood high schools for students who have higher-than-average achievement but still may not be able to gain admission to highly competitive selective enrollment high schools.

In part because of the geographic distribution of these schools and programs, the demographic and socioeconomic characteristics of these students vary widely. Students in IB programs have strikingly similar demographic and socioeconomic characteristics to other students in their school; they are largely first-generation college students, predominantly minority, and often come from neighborhoods with high levels of poverty and limited access to adults with college experience. This is also true of many students in selective enrollment high schools and in AP tracks.

2. The college qualifications of graduates from academically advanced programs are impressive. Nearly two-thirds graduate from high school with access to a selective or very selective four-year college.

Many students in academically advanced programs and schools graduate with ACT scores and grades that demonstrate to colleges that they have worked hard and done well in rigorous courses. Students in these programs have ACT scores above the national average and have much higher grade point averages (GPAs) than other CPS students. In fact, the average weighted GPA of students in neighborhood AP and IB programs is nearly a 4.0.

3. Strong college qualifications do not translate into matched college enrollment. Fewer than half of students from these programs enroll in colleges that match their college qualifications.

More than one-third of students in academically advanced programs enroll in a nonselective or two-year

college—or no college at all. Among selective enrollment students, for example, 64 percent are qualified to attend a selective or very selective college, but only 37 percent enroll in one. Similar patterns are observed among students in IB and AP programs. These students apply to more colleges than the average CPS student, but only apply to a few colleges that match their qualifications. Many academically advanced students end up defaulting to colleges within CPS's traditional feeder patterns; of those who attend a four-year college, more than 40 percent attend one of the six most popular colleges for CPS students.

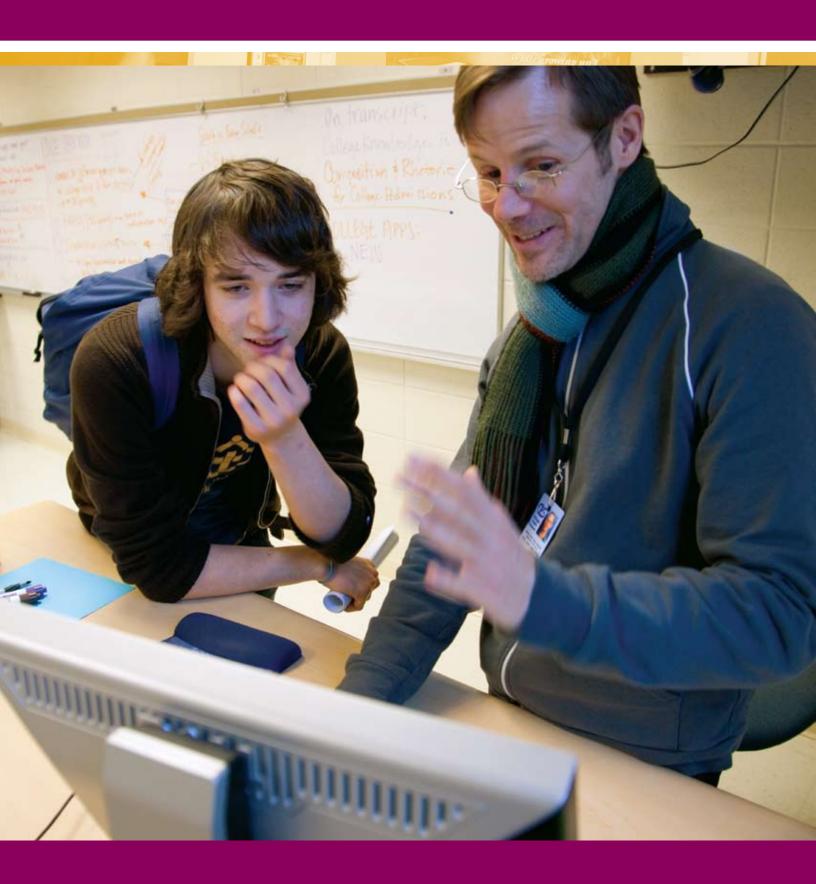
**4.** Students in academically advanced programs face distinctive challenges compared to their less qualified peers in navigating the road to college.

The college enrollment patterns of students in academically advanced programs often mirror those of their less qualified peers. As outlined in the "Potholes" report, having strong qualifications does not alter the reality that these students often come from families and neighborhoods that are less able to provide concrete

support and knowledge about the college admissions process. Too often, these students, like their neighborhood peers, struggle in taking the steps necessary to apply to and enroll in four-year colleges. In fact, one-fifth of students in academically advanced programs do not even apply to a four-year college.

There are also a number of barriers academically advanced students face related to the problem of match. First, though these students are in a position to conduct wider college searches that include more selective colleges, many do not understand the broad range of colleges to which their qualifications afford them access. Second, when they do consider more competitive colleges, they often lack the structured support necessary to navigate the application process for colleges that tend to have more complicated and specialized application procedures. Third, these students face competing demands from their challenging coursework. Finally, far too often, lack of knowledge of financial aid possibilities and lack of effective participation in financial aid prevent them from getting the aid they deserve.

Building the sophisticated knowledge base needed to enroll in more selective colleges requires that high schools do more than simply set expectations that students go to college: they must also fill the gaps in students'—and their parents'—understanding of college search, application, and selection. In this report, we raise new challenges that practitioners will have to meet in order to build college-going cultures that meet the specific needs of academically advanced students. For these students, our benchmark should not be whether or not they attend any four-year college. If we truly want their hard work to pay off, our benchmark should be whether students and their families have made a fully informed college choice based on full knowledge of the wide range of college options available.



### Introduction

? ducation reform is increasingly focused on improving college access and ✓ success for high school graduates, particularly through the rigor of their coursework. The Chicago Public Schools (CPS) has been on the forefront of this trend of expanded opportunities for rigorous high school experiences. Between 1999 and 2006, CPS opened five new selective enrollment high schools and expanded International Baccalaureate (IB) and Advanced Placement (AP) course offerings in neighborhood high schools. Hoping to build on the success of the long-standing IB program at Lincoln Park, CPS opened 12 small IB programs in neighborhood high schools in the late 1990s. Most importantly, CPS has seen a dramatic increase in AP participation. From 1998 to 2005, the percentage of CPS graduates who had taken at least one AP course more than doubled, from 13 percent to 28 percent. This report will focus on graduates of these academically advanced programs—selective enrollment schools, IB programs, and sequences of honors and AP courses. It expands on our previous work on the importance of developing specialized supports in the college search and application process and examines the challenges faced by the graduates of these academically advanced programs.

These programs have generated more opportunities for rigorous college preparatory experiences and some even have received state and national acclaim. In an accomplishment that would have seemed almost unimaginable 20 years ago when Secretary of Education William Bennett proclaimed Chicago schools the "worst in the nation," the district is now home to the four public high schools with the highest test scores in the state (Northside College Preparatory High School, Walter Payton College Preparatory High School, Whitney M. Young Magnet High School, and Jones College Preparatory High School). Lincoln Park, a neighborhood high school, has been a regular entry in *Newsweek* magazine's list of the top 100 high schools in the nation.

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While the demand for these academically advanced programs is already quite high, these programs serve a relatively small number of students. In the winter of 2007, we estimate that up to 12,000 CPS eighthgraders applied for one of the approximately 2,755 positions in the eight selective enrollment high schools in Chicago. Rising test scores have also expanded the pool of potential applicants beyond the capacity of selective enrollment high schools. In 2007, only about half of ninth-graders who scored at the seventh stanine or above on the ISAT attended a selective enrollment

high school; 28 percent of those scoring above the minimum test score needed to gain admission, the sixth stanine, attended one.<sup>2</sup> However, the opportunities to participate in an IB program or a sequence of honors and AP courses in the neighborhood high schools remain limited. Only 7 percent of 2006 neighborhood high school graduates have participated in an academically advanced program.

Although these programs serve a relatively small number of students, the good news, as we will document in this report, is that many of these CPS students

#### Previous Research

In 2004, the Consortium on Chicago School Research began a multi-year, multi-methods research project, The Chicago Postsecondary Transition Project. The quantitative project is tracking the post-high school experiences of successive cohorts of graduating CPS students and systematically analyzing the relationship between high school preparation, college choices, and postsecondary outcomes. This project also has a qualitative component, which began in the spring of 2005, that involved researchers interviewing a diverse group of students from three Chicago high schools from eleventh grade until two years after graduation and examining differences in the educational demands of their classroom environments through a linked observation study of high school and college classrooms.

The series *From High School to the Future* has released the following four reports to date that examine the challenges faced by urban students in attaining their educational aspirations:

From High School to the Future: A First Look at Chicago Public Schools Graduates' College Enrollment, College Preparation, and Graduation from Four-Year Colleges

In 2006, CCSR released its first major report from the Transition Project. This report focused specifically on understanding why, despite high aspirations, many CPS students were not making the transition to college, and why choices for students who did continue with their education were concentrated in two-year and nonselective colleges. A major finding of this report was that low ACT scores and, particularly, low GPAs were constraining students' access to college and undermining their success once enrolled. A second major finding of this report was that even those CPS students who enrolled in four-year colleges were graduating at very low rates. Once again, course performance emerged as an important contributor because students with low grades in high school were very unlikely to graduate from a four-year institution once enrolled.

### From High School to the Future: Potholes on the Road to College

Early in 2008, CCSR released a second report that examined how well CPS students participate in the college search and application process and what barriers they face in translating aspirations into college attainment. In this report, we find that low access to social capital (norms, information, and clear structures of support) means that many CPS students have difficulty managing the process of identifying colleges that match their qualifications and interests. Despite their high aspirations, they are not taking the steps to effectively apply to colleges and navigate financial aid. A significant finding is that, although most students have high aspirations to obtain a four-year degree, many do not even apply to a four-year

are graduating with the coursework and qualifications that give them access to selective and very selective four-year colleges. However, the strong academic qualifications of these students pose distinctive challenges, opportunities, and potential lessons for all schools. First, if graduates of these academically advanced programs are to fully capitalize on the opportunity to enroll in more selective colleges, they will need to navigate a more complicated process of college search and admission. These additional challenges and their significance are discussed later in this report. Second,

as CPS seeks to expand its AP course offerings and increase the qualifications of its students, there will likely be an increasing need for in-depth school supports to help students gain access to more selective colleges. These academically advanced programs could serve as models of college support practices in CPS to serve a potentially growing population.

Improving graduates' college access and success rates requires CPS to build rigorous academic programs. However, our previous report, From High School to the Future: Potholes on the Road to College, demonstrated

college. Those students who do apply and get accepted often do not enroll. Applying for financial aid is the most significant predictor of whether students who are accepted actually enroll. Concerns about paying for college, misunderstandings about financial aid, and "sticker shock" are important explanations of why students who aspire to go to college ultimately never apply.

### From High School to the Future: ACT Preparation—Too Much, Too Late

The majority of Chicago Public Schools students are not attaining the ACT scores they are aiming for, which they need to qualify for scholarships and college acceptance. In the third report of this series, the second of 2008, CCSR researchers look at the reasons behind students' low performance and what matters for doing well on this test. CPS students are highly motivated to do well on the ACT, and they are spending extraordinary amounts of time preparing for it. However, the predominant ways in which students are preparing for the ACT are unlikely to help them do well on the test or to be ready for college-level work. Four key findings emerged: (1) low ACT scores reflect poor alignment of standards and curriculum from K-8 to high school and from high school to college; (2) test strategies and item practice are not effective mechanisms for improving students' ACT scores; (3) ACT performance is directly related to students' work in their courses; and (4) incorporating the ACT into high school accountability is not an effective strategy for high school reform by itself, without accompanying strategies to work on instructional practice.

#### From High School to the Future: The Pathway to 20

Late in 2008, CCSR released a report that was inspired by a new goal in Chicago Public Schools: CPS juniors reaching a score of 20 or above on the ACT. It was based on a longitudinal analysis of more than 40,000 students from three junior classes (2005, 2006, and 2007) in Chicago Public Schools. An ACT score of 20 is actually lower than the state average and college-readiness benchmarks set by ACT, but it was seen as a realistic goal for Chicago students because graduates with this score or higher have a good chance of being accepted into Illinois state universities.

This report points to a "major misalignment" between the standards set by the state ISAT tests in elementary school and the college-readiness standards expected of all juniors in Illinois high schools as measured by the ACT, which is part of the state's Prairie State Achievement Examination (PSAE). The authors found that it takes a score high into the Meets Standards category on the eighth-grade ISAT to have a good shot at scoring well on the ACT in eleventh grade. Students who barely make Meets Standards have little or no chance of scoring well on the ACT.

that qualifications and skills are not the only factors that shape college access; even CPS graduates with strong academic qualifications and high aspirations for college often struggled in the application and search processes. Among students who had the qualifications to attend selective colleges and who aspired to attain a four-year degree, only three-quarters applied to a four-year college and only 62 percent ultimately enrolled.

While the "Potholes" report highlighted the importance of developing specialized supports for the college search and application process for highly qualified students, we did not look specifically at the experiences of students in academically advanced programs. We begin this report by presenting a portrait of the demographic characteristics and college qualifications of students in these programs. Understanding who these students are both academically and demographically is critically important in understanding what special opportunities and challenges these students will face in college planning. We then examine how students in these programs are navigating their road to college. We identify five areas where academically advanced students—most of whom are also first-generation college students—face particular challenges as they negotiate the complicated and very competitive college application process: (1) taking the basic steps necessary to apply to and enroll in a four-year college, (2) conducting an effective college search, (3) managing an accelerated—and complicated—college application process, (4) handling the competing demands of their coursework and college planning, and (5) understanding how to finance a college education and effectively participating in financial aid application. The first challenge on this list refers to the basic benchmarks set forth in the "Potholes" report, and the following four challenges take a deeper look at the unique issues graduates of academically advanced programs face in meeting those benchmarks in a more competitive college admissions process.

This report is not intended to be a rigorous evaluation of the efficacy of selective enrollment schools, IB programs, or AP initiatives. Rather, it is intended to provide critical information that allows school staff and district administrators to assess their own efforts and engage in a discussion of what it means to develop programs that prepare students for admission to top colleges and universities. The task of providing higher levels of preparation and support to more students is a daunting challenge. These students are participating in an increasingly competitive college admissions pool. As is frequently mentioned in the media, top colleges are rejecting more than 90 percent of their applicants; anxious seniors are applying to 20 colleges or more; families are hiring consultants to help students select and apply to colleges.<sup>3</sup> All this is taking place as college costs rise and the real value of financial aid declines.<sup>4</sup>

In this context, it is even more essential that urban high schools mount new efforts to ensure that their students have access to the supports they need to effectively plan for college. Urban and low-income students throughout the nation encounter the problems and barriers we identify in this report. CPS has become a national leader in taking on this issue, and many educators in Chicago already have made significant progress. Led by its Department of College and Career Preparation,<sup>5</sup> CPS is working to ensure that all students have access to the courses, opportunities, and experiences that will prepare them for a viable post-secondary education or career. Central to the success of this effort is developing effective and differentiated models for all students.

It is often assumed that top CPS students do not have any problem capitalizing on their high school success and finding their way to good colleges. We argue, however, that the road to college is not as easy or intuitive for these students as one might assume and that understanding the challenges faced by these students is critically important for the future of CPS. Building rigorous academic programs has become a central component of the high school reform strategies in Chicago. In particular, recent initiatives, such as the High School Transformation Project and the Advancement Via Individual Determination (AVID) program, rely on AP coursework to provide rigorous instructional experiences. The hope is that as these initiatives mature there will be an expanding pool of highly qualified students and, as a result, more and more students and schools will need to meet the challenges described in this report.

# Chapter 1

# The Programs and Qualifications of Their Graduates

The expansion of IB and AP programs, along with selective enrollment ▲ high schools, was accompanied by an overall increase in graduation standards for CPS students. In 1997, CPS raised graduation requirements to be aligned with minimum college admissions requirements, making all graduates fulfill this definition of college-ready. It also expanded opportunities to take more rigorous college-level courses and earn college credit to a wider range of students. In this report, we focus on this subset of CPS students. We look at students who graduated from what we term "academically advanced" programs—meaning, graduates of selective enrollment high schools, graduates of IB programs in neighborhood high schools, and graduates who have taken a rigorous sequence of honors and AP courses throughout high school (see Appendix A for details about the data and samples used in this report). In order to simulate the academic and social environments of IB programs and selective enrollment schools, we only define students as being in an AP program if they took a sequence of AP and honors courses in a school with at least 25 AP graduates, rather than as any student who has taken at least one AP course. We use 25 students as a benchmark because it is approximately equal to one classroom and to a graduating class of the smaller IB programs. AP is not officially a "program" in CPS that students apply to, but it is an important strategy to consider because most of the recent growth in collegelevel coursework has come through an expansion of AP courses.

> More than 60 percent of academically advanced students graduate with access to selective or very selective colleges.

We expect that participating in these academically advanced programs should have an impact on not only the qualifications of students for college but also on the likelihood that students will enroll in college. This impact could happen in several ways. First, these programs and schools are designed to expose students to more rigorous course content, which should increase students' readiness for college. More specifically, in the case of AP and IB programs, the curricula are intentionally linked to skills students will need to do college-level work and offer the opportunity to take exams that can lead to college credit. Second, these programs also may cause students to be more oriented toward college by providing them with higher expectations, an academically oriented peer group, greater access to support for college from teachers and counselors, and confidence in their ability to do college-level work. Third, because CPS students earn additional grade points when calculating their grade point averages (GPA) for taking honors, AP, and IB courses, these students automatically have the advantage of being able to report higher GPAs to colleges.

Finally, enrollment in these courses, programs, and schools may also act as a signaling mechanism to colleges that a student is college material—that is, willing to engage in a more rigorous academic experience and to work hard to achieve academic goals. A committee of the National Research Council surveyed deans of admission to understand the role AP and IB play in college admission decisions and found that participation in these programs is particularly important for admission to the most selective colleges.<sup>6</sup> A recent College Board study of the systems colleges use to make admissions decisions indicates that AP has become an important factor in this process; AP ranked among the most important factors in the admissions decisionmaking process for most schools evaluated in 2000.7 Moreover, participation in AP and IB programs may be particularly important in areas like Chicago where colleges might assume that the average student has not been exposed to challenging coursework. Indeed, as AP coursework has become more standard in suburban areas, college admission offices may expect AP courses to be on any college-bound student's transcript. One report by the U.S. Department of Education estimates that in 2003-04, graduates of high socioeconomic status (SES) backgrounds were more than three times more likely (50.9 percent versus 16.3 percent) to have taken an AP course than students from low SES backgrounds.8

There is not, however, any definitive evidence that AP courses provide a greater benefit to students than do other types of advanced courses. Indeed, one recent review of the literature concluded that despite the rapid growth of AP participation and the increasing investment in AP for low-income and minority students, there is little concrete evidence of benefits—as measured by grades in college, persistence, and likelihood of graduation—from simply taking AP courses.9 There is, however, some limited evidence from urban districts that expanding participation in AP is associated with improvement in the likelihood of enrollment in fouryear colleges. 10 There is even less evidence of the impact of participating in an IB program. Regardless of benefit, if AP is becoming a standard for college entry, then those who have not taken AP may be disadvantaged in the college marketplace.

In this section, we describe the three types of programs and schools that provide the opportunity for students to take college-level courses in high schools. From this point on, we will refer to these programs and schools as "academically advanced programs" and refer to the students who participate in these programs and schools as "academically advanced students." These are not the only college-ready students in CPS, as the district has mandated a curriculum that is aligned with college admissions standards and is intended to prepare all of its students for college. However, these academically advanced programs are explicitly intended to provide students who aspire to complete a college degree with the academic experiences and credentials they will need to apply to a wide range of colleges.

#### Selective Enrollment Schools

Selective enrollment schools are considered to be among the best high school options in Chicago. 11 Admission to selective enrollment schools is extremely competitive. In 2007, 12,000 students competed for approximately 2,755 slots in selective enrollment high schools.<sup>12</sup> After

### Expansion of Academically Advanced Opportunities in the Late 1990s

The expansion of selective enrollment schools and other academically advanced opportunities in CPS over the last two decades was driven by many factors. First, the expansion was described by top CPS administrators as a strategy to provide more high-achieving eighth-graders with access to academically advanced programs in CPS high schools. The expansion was also seen as an attempt to address issues of an increasing "brain drain" in Chicago; according to a Consortium report in 2000, in 1995, fully 27 percent of high-achieving students left CPS between seventh and ninth grades. A In addition, the expansion was meant to address the desegregation consent

decree with the federal government by attracting white students that might otherwise have attended private schools. Finally, many people suggested that the expansion was implemented in an effort to keep middle-class, white families from moving to the suburbs by providing them with quality schools that could match their suburban rivals.<sup>B</sup> In recent years, while CPS has continued this effort to create academically advanced opportunities, this effort has continued to affect a small number of CPS students; by 2006, these programs accounted for only 21 percent of non–special education CPS graduates.

accounting for applications from students enrolled in non-CPS elementary schools, we estimate that up to 40 percent of CPS eighth-graders in 2007 applied for a slot in a selective enrollment high school.

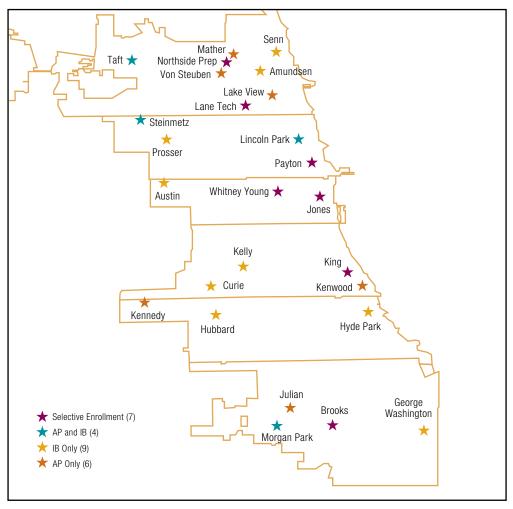
Until the late 1990s, there were only three high schools that required test scores for admissions: Lane Tech, Lindblom Tech, and Whitney Young. Between 1997 and 2006, CPS opened five new selective enrollment schools and closed Lindblom for renovations, expanding the number of options for students to seven selective enrollment high schools with graduating classes in 2006. While this expansion to seven selective enrollment schools was considerable, only 13 percent of all 2006 CPS graduates came from one of these selective enrollment schools.

Selective enrollment school options were previously limited to one school on the north side of Chicago (Lane), one in the central region of Chicago (Whitney Young), and one on the south side of Chicago (Lindblom). The selective enrollment schools created in the last decade have expanded options to students throughout Chicago. Of the more recently created selective enrollment schools, the brand-new schools—Northside and Payton—are located in the northern regions of the city, while conversion schools—Jones, King, and Brooks—are in the central

and southern regions (see Figure 1, which shows the locations of schools throughout the city that produced academically advanced graduates in 2006).<sup>13</sup> Given the racial isolation of many neighborhoods in Chicago, it is no surprise that the regional distribution of these selective enrollment schools has resulted in these schools having very different student populations, which we will discuss in the next section of this report.

The selective enrollment schools also vary greatly in their size. The older selective enrollment schools (Lane Tech and Whitney Young) are large, while the new selective enrollment schools are relatively small compared to the average CPS high school. Lane Tech produces the most graduates by far, and the overall numbers for the selective enrollment high schools disproportionately reflect Lane. In 2006, Lane Tech graduated 43 percent of the city's entire selective enrollment student population, followed by Whitney Young with the second largest proportion at 18 percent (see Figure 2). The other five selective enrollment schools are much smaller, collectively making up less than half of the selective enrollment population; Northside, Brooks, King, Payton, and Jones graduated less than 200 seniors each in 2006.

FIGURE 1
Schools with 2006 graduates of academically advanced programs



Note: Schools with AP programs are only included if they had at least 25 students who took at least six honors courses and two AP only classes

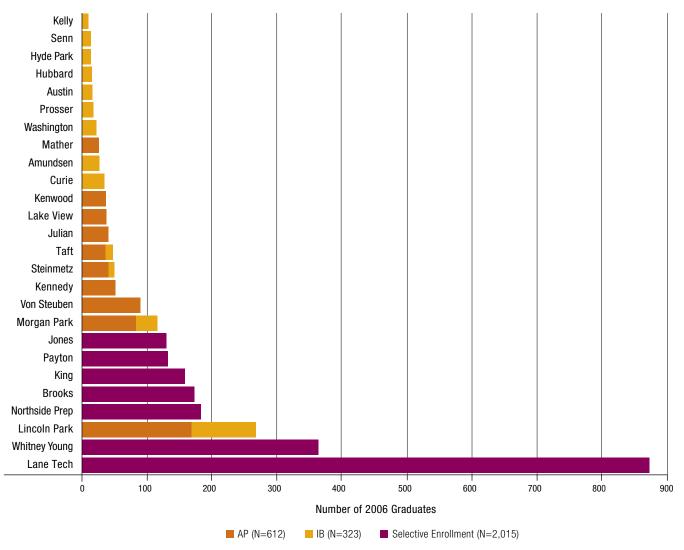
### International Baccalaureate Program

The IB program and its associated curriculum began in 1968 in Geneva, Switzerland, as a way of creating a common curriculum across countries for internationally mobile students. Students who perform sufficiently well on a universal set of rigorous written products, timed tests, and oral examinations can receive an IB diploma, which is recognized as a demanding high school curriculum by many colleges and universities across the world. In 1981, Lincoln Park High School became the first CPS school to establish an IB program. This remains by far CPS's largest IB program and continues to draw students from throughout the city. In the

late 1990s, IB programs were established on a smaller scale in 12 neighborhood high schools. <sup>14</sup> Typically, these schools target a group of advanced incoming ninth-graders for the program. Some schools provide a structured pre-IB curriculum to one or two classrooms of students the first two years of high school. The IB program formally begins in students' junior year, when students start taking the courses in the comprehensive IB curriculum. In this report, students are classified as being in an IB program if they have taken at least seven courses identified in their transcripts as IB courses and attend schools that have IB programs. As a result, students who began the IB program but left before

FIGURE 2

#### 2006 program graduates by school



**Note:** These numbers are from graduating class of 2006 and do not include students who were in special education. Schools with AP programs are only included if they had at least 25 students who took at least six honors courses and two AP classes.

completing at least seven courses are not included in this category. Using this definition, these students may be more accurately described as those who "successfully" completed an IB program at their schools—although we are unable to determine if students ultimately received an IB diploma. Throughout this report, we will group Lincoln Park separately from other IB programs because of the differences in the demographics of their students and the IB admissions requirements. From this point on, we will refer to students who were in the IB program at Lincoln Park as "Lincoln Park IB students" and to students who were in smaller neighborhood IB programs as "IB students." More

information on the educational outcomes of the Lincoln Park IB program can be found on page 14.

Compared to the other academically advanced options, IB continues to be a small program within CPS and has grown very little since its expansion in the late 1990s. In 2006, 323 CPS graduates had completed an IB program, with almost one-third of those students graduating from Lincoln Park. This is only slightly more than the 236 students who graduated from IB programs in 2003. Thus, non-Lincoln Park IB students make up only 8 percent of the population that graduated from an academically advanced program in 2006.

### Lincoln Park's IB Program

Throughout this report, we have made a strong distinction between students in Lincoln Park's IB program and students in smaller IB programs housed in other neighborhood high schools. We make such a strict distinction because Lincoln Park's IB program serves a fundamentally different population of students than are served in other programs, but the accomplishments of this group of students should also be noted.

As we have shown, Lincoln Park IB students enter high school with strong advantages: on average, they score in the 88th national percentile on the Iowa Tests of Basic Skills, which is much higher than even students in selective enrollment schools; they are much less likely to qualify for free or reduced price lunches; and they live in neighborhoods with substantially lower levels of concentrated poverty and with access to more educated and professional adults (see Table 3 and Figure 5). Demographically, Lincoln Park IB students are a fairly gender-balanced group, but students in this program are overwhelmingly white and Asian American, unlike the IB students in other neighborhood schools (see Table 2).

Not surprisingly, Lincoln Park IB students have impressive qualifications for college when they graduate from high school. These students have very strong high school achievement, graduating with an average unweighted GPA of 3.2 and ACT score of 27.6 (see Figure 7). Their ACT scores are significantly higher than other groups of academically advanced students even when controlling for students' background and eighth grade test scores (see Figure 9A). These high grades and ACT scores have led to increased access to competitive colleges: 89 percent of these students are qualified to attend a very selective college and 96 percent are qualified to attend at least a selective school. These students are also very ambitious when it comes to college search and selection: more than half apply to at least five colleges and more than half apply to at least three match colleges. Given their strong academic qualifications and careful college planning, they are able to enroll in colleges that match their college access: more than three quarters enroll in selective or very selective colleges. Moreover, they are substantially less likely than other students to concentrate their college searches to traditional CPS feeder patterns: only 26 percent enroll in one of the "Top 6" four-year colleges for CPS graduates. More importantly, among the large number of students who enroll in four-year colleges beyond the "Top 6", nearly all enroll in selective or very selective four-year colleges.

### Advanced Placement Track

Many schools also have developed concentrations of students taking AP courses. This expansion of AP opportunities was a key strategy for providing more CPS students with academically challenging coursework in their own neighborhood. Over the past decade, there has been a substantial increase in the number of neighborhood schools that offer at least one AP class, as well as increases in the overall number of AP classes offered within schools. In 2005, almost 80 percent of neighborhood high schools offered at least one AP course and nearly half offered four or more classes.

Though many students in CPS take at least one AP course, fewer take more than one and even fewer take a sequence of honors and AP courses throughout high school. As shown in Table 1, there has been a rapid expansion of AP in CPS; in 2006 more than one-third of graduates have taken at least one AP course. However, this expansion has occurred primarily by giving students access to one or perhaps two AP courses and not by providing students with a rigorous sequence of courses throughout high school. Only 12 percent of graduates have taken two or more AP courses as well as at least six honors courses—

Lincoln Park is the only neighborhood school in CPS to be recognized as a top American high school by *Newsweek* and *U.S. News and World Report*. While the IB students at Lincoln Park don't look like the average

CPS student, Lincoln Park's IB program seems to offer academically rigorous coursework and support for college planning to the students it serves.

TABLE A
Indicators for Lincoln Park IB students

Very Selective	89%	5 or More	40	
Selective	7%	3-4	15	
Somewhat Selective	4%	1-2	36	
Nonselective/Two-Year	1%	None	90	
ollege Attendance (2005 & 2006 Graduates)		College Search Indicators (2005 & 2006 Graduates)		
Very Selective	55%	Among Four-Year College-Goers		
Selective	21%	Attend a "Top 6" College	26	
Somewhat Selective	5%	Attend a College Other Than the "Top 6"	74	
Nonselective/Special or Unrated/Two-Year	4%	Attenu a conege other man the Top o	74	
No College	14%	College Choice Among Four-Year College-Goers W Attend a "Top 6" College	'ho Do No	
College Match (2005 & 2006 Graduates)		Very Selective	59	
Above Match	5%	Selective	34	
Match	55%	Somewhat Selective	49	
Below Match	19%	Nonselective/Special or Unrated	4	
Far Below Match  Jumber of Applications Completed (2005 & 2006 G	21%			
5 or More	57%			
3-4	22%			
1-2	21%	Note: The Top 6 popular four-year colleges for CPS students are UIC, University of Illinois at Urbana-Champaign, Northeastern IL, Northern IL, Chicago State, and Southern IL		

indicating more intentional programming around advanced coursework.

Since taking one AP course at the end of high school does not appear to be a fair comparison to taking a more explicitly college-oriented curriculum throughout high school (like the IB program), for the purpose of this report we have used the following definition of "AP track": two or more AP courses and six or more honors courses throughout high school. We consider students "AP students" if they have completed this sequence of courses. This suggests a pattern of rigorous coursework more equivalent to that of the IB program

or the curriculum in a selective enrollment school, as opposed to taking just one or two AP courses.

We further limited our sample of AP students to those who were not in selective enrollment high schools but were in high schools that had at least 25 students taking this track, which suggests a school-wide strategy of college preparation rather than a method of simply accommodating a few students. Since some students take AP classes as part of their IB coursework, students who were identified as being in the IB program were excluded from the AP group. Using these definitions, in 2006, there were 612 students taking the AP track across

TABLE 1

About a third of CPS graduates took at least one AP course, while only slightly more than a tenth took a sequence of honors/AP

	All High Schools (N = 13,574)	Neighborhood High Schools (N = 11,559)	Neighborhood High Schools with at Least 25 Students in a Rigorous Sequence of Honors/AP (N = 3,306)	Selective Enrollment Schools (N = 2,015)
Percent Taking at Least 1 AP Course	34.4%	30.6%	45.8%	56.0%
Percent Taking 2 or More	18.4%	14.8%	28.7%	38.9%
Percent Taking Sequence of 6 Honors/2 AP	12.4%	8.6%	18.5%	34.0%

Note: These numbers are from graduating class of 2006 and do not include students who were in special education or attended an alternative high school.

ten neighborhood schools, including four schools that also had an IB program.<sup>15</sup> This was an increase of more than 150 percent since 2003. In 2006, Lincoln Park graduated the most AP students with about 28 percent of the AP population; Von Steuben and Morgan Park followed <sup>16</sup> (See Figure 2).

Although we have seen significant increases in the number of schools that offered AP classes in the last decade, graduates who have taken an AP track in a neighborhood school still only accounted for 20 percent of students in these academically advanced programs in 2006. The number of students taking a sequence of AP and honors courses is likely to rise in the coming years. Beginning in the 2006-07 school year, four Chicago high schools received grants from the Gates Foundation to participate in the College Board's EXCELerator schools project. EXCELerator schools focus on building strong pre-AP curricula and supports through the use of the College Board's SpringBoard Curriculum and the AVID program. Extra support and training is provided so these schools can expand AP offerings and college counseling. Finally, intensive AP course offerings have also become a central strategy in the district high school reform initiative, which is intended to bring rigorous curriculum and build pre-AP and AP strategies and supports in neighborhood high schools. This expansion of AP in CPS will be the topic of a forthcoming CCSR research report.

### Achievement and Demographic Characteristics of Students in Academically Advanced Programs

#### **Eighth-Grade Achievement**

Selective enrollment schools attract high-achieving students from throughout the city. As previously discussed, IB students are recruited to the program and generally must meet a minimum test score cutoff (a stanine 6 or above). Students in AP differ in that they are not necessarily a part of a designated program and usually enroll in their high schools through the regular admissions process. We designate students as AP if they have taken a sequence of honors and AP courses; as a result, these are students who were identified as higher performing by their schools and placed into these courses. Not surprisingly, students across these programs and schools have higher achievement when they enter high school than students in the rest of the system.

Figure 3 shows the distribution of entering test scores for students in these academically advanced programs. Students in selective enrollment high schools and in the very selective Lincoln Park IB program have much higher eighth-grade test scores than students in neighborhood IB programs or students who took a rigorous sequence of honors and AP courses. Sixty-four percent of selective enrollment students have eighth-grade test scores that place them in the highest quartile on national norms, compared to 51 percent of AP students and 52 percent of

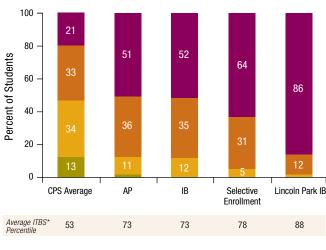
IB students. Although IB and AP students have lower test scores, on average, compared to their selective enrollment counterparts, their achievement is markedly higher than the average CPS student. IB programs and AP offerings in neighborhood high schools seem to fill an important gap for students who are high-achieving but still may not be able to gain admission to highly competitive selective enrollment high schools.

#### **Demographic Characteristics**

In part because of the geographic distribution of these school and programs, the demographic and socioeconomic characteristics of students in these programs vary widely—ranging from students in IB programs who have family background characteristics very similar to those of other students in their neighborhood high school to students at Northside and Payton who generally come from families and neighborhoods with comparatively high socioeconomic status. Overall, students in selective enrollment schools and in the AP track are much more likely to be white/other ethnic (28 percent) and Asian American (15 percent) than the average CPS student (see Table 2). There are, however, wide differences across selective enrollment schools in the racial/ ethnic composition of their student bodies. Gwendolyn Brooks and King serve predominantly African American students (see Figure 4); Jones, Payton, and Whitney Young are predominantly minority (African American and Latino); Lane Tech serves a higher proportion of Latino students; and Northside serves predominantly white and Asian American students.

IB programs serve a much higher proportion of minority students than selective enrollment schools, reflecting the composition of their host schools. More than two-thirds of IB students (68 percent) are African American and Latino. The IB program is distinguished by its high proportion of Latino students (35 percent), largely because the programs are concentrated in Latino neighborhoods. African Americans are

FIGURE 3
Students in selective enrollment schools and Lincoln Park IB scored higher on eighth-grade tests than AP and IB students



Eighth-Grade National Quartile on the ITBS\*

Lowest Quartile Second Quartile Third Quartile Highest Quartile

\*ITBS is the lowa Tests of Basic Skills, which all CPS eighth-graders were required to take prior to 2006.

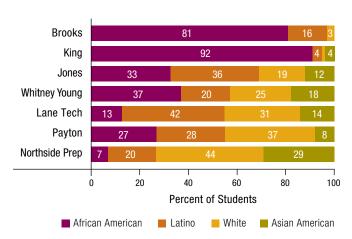
**Note:** These numbers are from graduating classes of 2003-2006 and do not include students who were in special education or attended an alternative high school. Schools with AP programs are only included if they had at least 25 students who took at least six honors courses and two AP classes.

TABLE 2
Neighborhood IB programs serve higher proportions of underrepresented minority students

	CPS Average (N = 54,563)	AP (N = 1,792)	IB (N = 748)	Selective Enrollment Schools (N = 7,931)	Lincoln Park IB (N = 342)
Male	41%	36%	33%	42%	45%
Female	59%	64%	67%	58%	55%
African American	46%	34%	33%	26%	6%
Latino	35%	21%	35%	31%	8%
White	13%	29%	19%	28%	54%
Asian American	6%	15%	13%	15%	32%

**Note:** These numbers are from the graduating classes of 2003-2006 and do not include students who were in special education or attended an alternative high school. Schools with AP programs are only included if they had at least 25 students who took at least six honors courses and two AP classes.

FIGURE 4
Selective enrollment schools vary in the proportion of underrepresented minorities they serve



**Note:** These numbers are from the graduating classes of 2003-2006 and do not include students who were in special education.

underrepresented in IB programs because there are fewer IB programs in the predominantly African American neighborhoods on the south and west sides of Chicago.

One of the challenges for urban students who aspire to attend college is that many of these students are attempting to be the first in their family to attend college—what is typically termed first-generation college students—and often live in neighborhoods with few college-educated adults. Furthermore, CPS students are also very likely to be lower-income and to have parents born outside of the United States (see Appendix B for a description of the variables used in this report). Overall, as seen in Table 3, 79 percent of CPS seniors report that their mother had not completed a four-year degree, and 45 percent report that their mother was born outside of the United States. Compared to IB students, students in selective enrollment schools and in AP programs are slightly less likely to be first-generation college students and more likely to have mothers born outside of the United States. Sixty-two percent of graduates of selective enrollment schools report that their mother had not graduated from college, and about half report that their mother was born outside of the United States. IB students are the least likely to have mothers with college experience and mothers born in the United States. Eighty percent of IB students report that their mother did not have a four-year degree, and the majority of IB students (58 percent) report that their mother was born outside of the United States. In addition, IB students are as likely as other CPS students to be eligible for free or reduced price lunch. Three-quarters of graduates of IB programs are eligible for free or reduced price lunch, along with 58 percent of AP students and 49 percent of students in selective enrollment schools. The socioeconomic characteristics of students in academically advanced programs suggest that many of these academically advanced students have limited resources to support college planning in their homes and neighborhoods and many come from families with few financial resources. Census data confirms this portrayal and demonstrates the diversity of student body populations across these programs and schools.

Concentration of poverty and mean social status—two variables collected and analyzed as a part of the 2000 census data—are related but distinct measures of the resources available to students in their communities. Concentration of poverty measures the percentage of unemployed adult males and the percentage of families living below the poverty line in a given area—so negative numbers of concentration of poverty indicate a neighborhood with *less* poverty than the average for CPS students. Conversely, mean social status measures the average education level of adults in a community, as well as the percentage of adults who work as managers or executives in their occupation—so *positive* numbers of mean social status indicate a neighborhood where there is a *higher* proportion of educated and professional adults.

Figure 5 presents the distribution of the average census tract characteristics of graduates of IB and AP programs and each selective enrollment school compared to the CPS average. Strikingly, IB students live in neighborhoods that are quite similar to the average CPS graduate on both measures. These students, in fact, share very similar demographic and family background characteristics to students who attend the same high schools but are not in the IB program (see Appendix C). This, as we will discuss in the next section, presents a unique challenge for high schools serving IB students. While these students had higher entering achievement and clearly showed the motivation to attend college by their willingness to commit to a rigorous program of study, their family background, on average, is very

18

TABLE 3

IB students are more likely to come from less advantaged homes

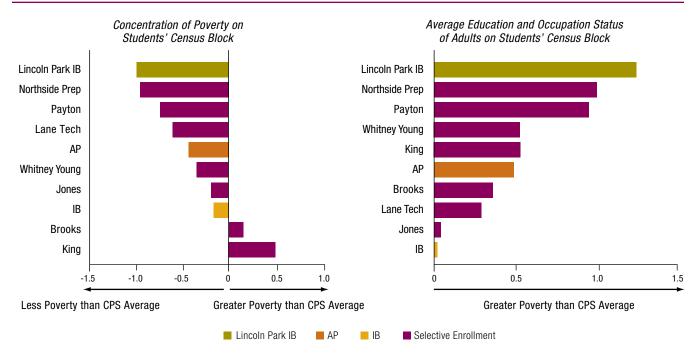
	CPS Average (N = 54,563)	AP (N = 1,792)	IB (N = 748)	Selective Enrollment Schools (N = 7,931)	Lincoln Park IB (N = 342)
Not Born in the U.S.*	20%	21%	24%	14%	Not Available
Mom Not Born in the U.S.*	45%	49%	58%	47%	Not Available
Mom Does Not have a Four-Year Degree**	79%	71%	80%	62%	Not Available
Free or Reduced Price Lunch	77%	58%	77%	49%	33%

<sup>\*</sup>Data come from the 2001 or 2005 CCSR Student Surveys

Note: Data are from graduating classes of 2003-2006 and limited to students who answered the 2001, 2003, or 2005 CCSR Student Surveys. We do not include Lincoln

Park data because we cannot publish survey data by school. Student free or reduced price lunch status was determined by the spring of their senior year. These numbers do not include students who were in special education or attended an alternative high school. Schools with AP programs are only included if they had at least 25 students who took at least six honors courses and two AP classes.

FIGURE 5
Students in academically advanced programs have widely varying access to resources in their neighborhoods



**Note:** Data are from the graduating classes of 2003-2006. Concentration of poverty and average education and occupation status of adults on students' block were based on 2000 U.S. Census information on the block group in which students lived. These variables are described in greater

detail in Appendix B. These data do not include students who were in special education or attended an alternative high school. Schools with AP programs are only included if they had at least 25 students who took at least six honors courses and two AP classes.

similar to other students in the same school. By comparison, AP students appear slightly more advantaged than the average student in CPS.

The socioeconomic characteristics of student bodies differ widely across selective enrollment high schools, reflecting their racial/ethnic composition. As we documented in the "Potholes" report, African American students in Chicago are distinguished by living in areas of relative economic disadvantage.<sup>17</sup> Conversely, Latino students are the least likely to live in neighborhoods where they have access to adults with high levels of education and who work in professional and

<sup>\*\*</sup>Data come from the 2005 CCSR Student Surveys

managerial occupations. Although we might expect students who attend academically advanced programs to be comparatively advantaged, we see these similar patterns in concentration of poverty and social status among academically advanced students. For example, despite serving students with higher academic qualifications, the predominantly African American selective enrollment high schools (Brooks and King) have student populations that come from neighborhoods with higher concentrations of poverty than the CPS average, just like other African American schools do. Similarly, like other predominantly Latino schools, many IB programs and some selective enrollment schools (such as Jones) serve students who come from neighborhoods with limited access to adults with high levels of education. Thus, the neighborhood and family background characteristics of graduates of these programs suggest that—just like their peers across the district—many of them have limited access to social capital for college—the norms, information, and support for college planning embedded in their social relationships. Thus, these students will likely face barriers to effectively planning for college, as well as significant financial obstacles.

## College Qualifications of Students in These Programs

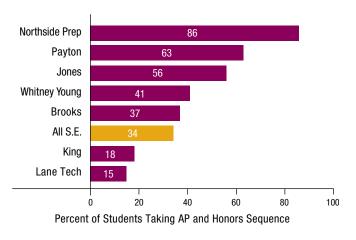
One of the central goals of academically advanced programs is to ensure that students are getting the academic experiences they will need to be prepared for college and successfully compete in the college admissions process. In this section, we examine the college qualifications of graduates of academically advanced programs. When making admissions decisions, colleges rely heavily on three measures of students' performance in high school: (1) scores on college admissions test like the SAT and ACT; (2) performance in coursework as measured by GPA and class rank; and (3) coursework quality, including whether students met minimum coursework requirements for college admissions or participated in advanced coursework like AP and IB. To understand the college qualifications of students in academically advanced programs, this section first looks at the average GPAs and ACT scores of these graduates. We then summarize what types of colleges these students would likely have access to, given their qualifications based on ACT scores, unweighted GPAs, and academic coursework.<sup>18</sup>

### Characterizing College Qualifications: The Role of Advanced Coursework

When determining the type of college to which students in academically advanced programs are likely to gain admission, an important consideration is whether AP and IB coursework gives students an advantage in the college admissions process over students with similar qualifications who have not taken similar coursework. As previously discussed, there are several mechanisms by which AP and IB coursework may offer an advantage to students in college admissions, both because students earn higher weighted GPAs and because college may explicitly reward AP and IB courses. A critical consideration in this discussion is whether two students who graduate from the same CPS high school with similar ACT scores and grades would face different chances of admission to the same college if they differ in the extent to which they participated in honors and AP coursework. Once weighting is applied to their grades, the student who took honors and AP courses will have a higher GPA to report to that college. That student may also be viewed as more oriented toward college and more prepared to succeed by nature of having opted to take advanced courses.

FIGURE 6

Selective enrollment schools differ widely in the percentage of their students participating in AP and honors sequences



**Note:** These numbers are from graduating class of 2006 and do not include students who were in special education.

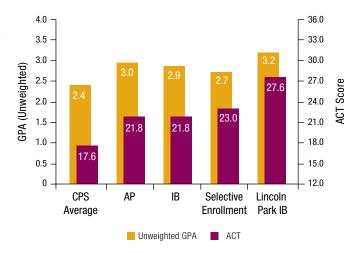
Graduates of academically advanced programs differ widely in the extent of their participation in honors and AP/IB coursework. By definition, all IB and AP graduates in this study have taken a minimum number of AP and IB courses; but AP exposure differs widely across selective enrollment schools. In the 2006 cohort, only 34 percent of graduates of selective enrollment high schools had taken at least six honors and two AP courses throughout high school and had, therefore, met our "AP track" criteria. Given national trends in participation in AP courses and that these schools are meant to provide a rigorous college preparatory experience, this number might seem surprising low. However, it is largely driven by the fact that only 15 percent of students at Lane Tech, by far the largest selective enrollment school in CPS, take this sequence of courses (see Figure 6). By comparison, 86 percent of graduates of Northside do so.

### What Kind of GPAs and ACT Scores Do Academically Advanced Students Graduate With?

Low ACT scores have been a particular concern for CPS because they present a barrier to college enrollment for most students. CPS has set the goal for students to reach a 20 on the ACT, an ACT score that would likely provide access to most public four-year colleges in the state. This goal is well above the current CPS average of 17.6 in 2006. As seen in Figure 7, the average ACT score of students in selective enrollment high schools is 23.0, well above the average for CPS and above the averages for the rest of Illinois (20.5) and the nation (21.1).<sup>19</sup> Students in IB and AP have lower average ACT scores than students in selective enrollment high schools, an average of 21.8, but those scores are slightly above the state and national comparisons.

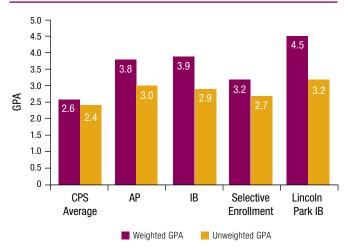
High ACT scores of students in academically advanced programs partly reflect the much higher entering test scores of these students. In addition, the average unweighted GPAs of these students suggest that students in these programs are working hard throughout high school.<sup>20</sup> The average unweighted GPA of graduates of AP and IB programs is approximately 3.0, slightly higher than the average for graduates of selective enrollment schools. The combination of rigorous coursework and high levels of course performance

FIGURE 7
Students in selective enrollment schools have higher ACT scores while students in IB and AP have higher unweighted GPAs



**Note:** These numbers are from graduating classes of 2003-2006 and do not include students who were in special education or an alternative high school. Schools with AP programs are only included if they had at least 25 students who took at least six honors courses and two AP classes.

# FIGURE 8 High grades combined with advanced coursework means that IB students graduate with very high weighted GPAs



**Note:** These numbers are from graduating classes of 2003-2006 and do not include students who were in special education or attended an alternative high school. Schools with AP programs are only included if they had at least 25 students who took at least six honors courses and two AP classes.

means that most students in academically advanced programs graduate with very high weighted GPAs. The average weighted GPA of graduates of IB programs is 3.9 and 3.8 for AP students (see Figure 8). The average selective enrollment student, moreover, leaves high school with a weighted GPA of 3.2, though average GPA varies greatly across the selective enrollment high schools (see Appendix D for disaggregated data on selective enrollment high schools).

### College Qualifications Adjusted for Students' Entering Test Scores and Demographic Characteristics

In some ways, it is not fair to compare the average ACT scores and GPAs of students from selective enrollment schools, with those of students from IB and AP programs because, as we discussed previously, students in IB and AP programs in neighborhood schools have lower average entering eighth-grade achievement. Furthermore, students in IB programs and students who engage in a sequence of AP and honors classes in neighborhood high schools are also more likely to come from families and neighborhoods with fewer educational resources. Thus, it would be more fair to compare the average ACT and GPA performance of graduates of these schools to students who are comparable in their entering eighth-grade achievement and demographic characteristics. Figures 9A and 9B illustrate the results of a multivariate analysis that estimated differences in unweighted GPAs and ACT scores among students in these schools and programs, once we had accounted for their academic, demographic, and socioeconomic differences (see Appendix B for descriptions of the variables and Appendix E for details on the analytic models). In essence, this analysis examines how the ACT scores and GPAs would differ for similar students who attended each type of academically advanced program.

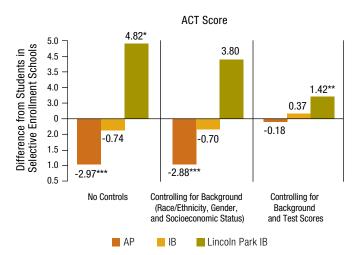
As shown in Figure 9A, once we have accounted for differences in students' entering achievement and demographic and socioeconomic characteristics, the ACT scores of IB students, students in AP tracks, and students in selective enrollment schools are quite comparable. For example, before we account for academic, demographic, and socioeconomic differences, students in IB programs have predicted ACT scores approximately 2.97 points lower than the average for students in selective enrollment schools, while students in the Lincoln Park IB programs have predicted ACT scores approximately 4.8 points higher than the average for students in selective enrollment schools (see Figure 9A). To put this simply, among students with similar eighth-grade test scores and similar demographic and socioeconomic characteristics, we do not observe differences in ACT performance between IB, AP, and selective enrollment graduates. However, much but not all of the higher ACT performance of students in the Lincoln Park IB programs can similarly be attributed to the high entering achievement and demographic characteristics of their student body population. Nevertheless, among students with entering eighth-grade achievement data, we predict that Lincoln Park IB students would graduate with ACT scores approximately 1.42 points higher than demographically and socioeconomically comparable students in a selective enrollment school.

In a similar analysis, when examining students' GPAs, a different pattern emerges. As we saw in Figure 7, students in AP programs and IB programs in neighborhood high schools graduate with higher GPAs than their counterparts in selective enrollment schools. After accounting for the fact that these students entered these programs with lower test scores and greater socioeconomic disadvantage, the predicted differences get larger. Thus, we find that if we compared the average GPAs of graduates with comparable demographic and socioeconomic backgrounds across these programs, IB and AP students would have a more pronounced (0.35 higher for AP and 0.26 higher for IB) difference in their GPAs (see Figure 9B).

These results suggest that students in IB and AP perform no better or no worse on the ACT than students with similar demographic characteristics and achievement who attend selective enrollment schools-and that they graduate with slightly higher coursework performance, as measured by unweighted GPA. Yet, there are many possible reasons why IB and AP students seem to be performing as well as or better than students in selective enrollment schools. First, we are comparing a very select and smaller group of higher achievers who have excelled in their neighborhood high schools to all graduates of selective enrollment schools, which have varying outcomes by school. Another interpretation would be that AP tracks and IB programs may be providing more supportive and intensive environments for their students. It is also possible that grading standards may be different across these programs, leading to higher GPAs in the smaller programs. Furthermore, unfortunately we do not know how many students start the IB program and then leave, and we would expect that those students who complete the program are a slightly biased sample in that they have performed better in high school than the

FIGURE 9A

Controlling for students' background and test scores, students in IB, AP, and selective enrollment schools have similar ACT scores

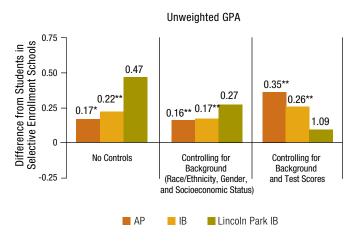


<sup>\*\*\* =</sup> p-value < 0.01, \*\* = p-value < 0.05, \* = p-value < 0.10

**Note:** The difference is between an average student who went to a selective enrollment school versus an average student who was in another academically advanced program. The results come from hierarchical linear models. Graduates included in the models were limited to those who were graduates of classes 2003-2006 and in an academically advanced program or school. The final bars in this figure adjust for student demographic, socioeconomic, and academic characteristics. See Appendix E for a description of the model used in this analysis. Schools with AP programs are only included if they had at least 25 students who took at least six honors courses and two AP classes.

#### FIGURE 9B

Controlling for students' background and test scores, students in IB and AP have higher unweighted GPAs than students in selective enrollment schools



<sup>\*\*\* =</sup> p-value < 0. 01, \*\* = p-value < 0.05, \* = p-value < 0.10

**Note:** The difference is between an average student who went to a selective enrollment school versus an average student who was in another academically advanced program. The results come from hierarchical linear models. Graduates included in the models were limited to those who were graduates of classes 2003-2006 and in an academically advanced program or school. The final bars in this figure adjust for student demographic, socio-economic, and academic characteristics. See Appendix E for a description of the model used in this analysis. Schools with AP programs are only included if they had at least 25 students who took at least six honors courses and two AP classes.

students who do not complete the program. Similarly, students in neighborhood high schools who have persisted in taking multiple honors and AP courses are those who have been the most successful in their high schools. Thus, it would be inappropriate to interpret these results as a rigorous value-added analysis of these programs because we are looking only at graduates of these small programs. Nevertheless, this analysis does suggest very good news for graduates of neighborhood high schools who participate in these programs: they are indeed performing as well in their classes and on tests as graduates of selective enrollment high schools, given their background and prior achievement.

### Do Students in Academically Advanced Programs Have Access to More Selective Colleges?

Many students in selective enrollment high schools and in academically advanced programs in neighborhood schools graduate with ACT scores and grades that demonstrate to colleges that they have worked hard in high school and done well in their rigorous courses. Yet, how do these GPAs, ACT scores, and coursework patterns translate into access to colleges of varying selectivity? To characterize college access for CPS students, we developed a rubric that indicates the minimum GPAs and ACT scores that CPS graduates would need to have a high probability of being accepted to and enrolling in colleges of varying selectivity (see Table 4). Our categories are based on Barron's college competitiveness ratings (see Appendix F for details on Barron's categories). We developed this rubric using the modal college attendance patterns of students with different GPA and ACT score combinations. We use students' unweighted GPA to allow us to separate course performance as measured by grades from the coursework students took. We further characterize students' qualifications by whether they were enrolled in an IB program or whether they were a part of the AP program and took at least six honors and two AP courses, which in some cases moves them from access to a selective college to a very selective college.<sup>21</sup>

Not surprisingly, about 90 percent of graduates of selective enrollment schools and of AP and IB programs in neighborhood high schools have access to at least a somewhat selective four-year college (see Figure 10).

TABLE 4

Categories for access to college types based on CPS graduates' GPAs and ACT scores and patterns of college coursework

		Unweighted GPA in Core Courses						
		<2.0	2.0-2.4	2.5-2.9	3.0-3.4	3.5-4.0		
Composite ACT Score	Missing ACT	Two-Year Colleges	Nonselective Four-Year Colleges	Somewhat Selective Colleges	Selective Colleges	Selective Colleges		
	<18	Two-Year Colleges	Nonselective Four-Year Colleges	Somewhat Selective Colleges	Somewhat Selective Colleges	Selective Colleges		
	18-20	Nonselective Four-Year Colleges	Somewhat Selective Colleges	Somewhat Selective Colleges	Selective Colleges	Selective/Very Selective Colleges		
	21-23	Somewhat Selective Colleges	Somewhat Selective Colleges	Selective Colleges	Selective/Very Selective Colleges	Selective/Very Selective Colleges		
	24+	Somewhat Selective Colleges	Selective/Very Selective Colleges	Selective/Very Selective Colleges	Very Selective Colleges	Very Selective Colleges		

**Note:** Students in the Selective category who are either in an IB program or have taken at least two AP and at least six honors courses were moved up to the Very Selective

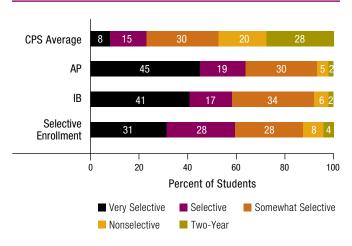
category. From *Potholes on the Road to College* (Roderick, Nagaoka, Coca, and Moeller 2008). See Appendix F for a description of the Barron's categories.

What is impressive is that so many of the graduates of these programs have access to selective and very selective colleges. Only 23 percent of CPS graduates leave high school with qualifications that would give them access to selective colleges (such as DePaul University) or very selective colleges (such as the University of Chicago or the University of Illinois at Urbana-Champaign), while more than 60 percent of students in each of these programs graduate with access to selective or very selective four-year colleges (see Figure 10). Fully 45 percent of AP students in neighborhood high schools and 41 percent of IB students graduated with access to a very selective college.

This picture of the college qualifications of students in academically advanced programs is extremely positive, but the success of these students and their programs presents its own set of opportunities and challenges. On average, selective enrollment high schools in Chicago produce a majority of graduates who are qualified to attend more selective four-year colleges. In addition, the IB and AP programs provide an opportunity for high-achieving students in neighborhood high schools—who chose not to attend or were not admitted to selective enrollment schools—to leave

FIGURE 10

About half of students in academically advanced programs have access to selective and very selective colleges



**Note:** These numbers are from graduating classes of 2003-2006 and do not include students who were in special education or attended an alternative high school. For results on IB students at Lincoln Park, see Lincoln Park Sidebar. Schools with AP programs are only included if they had at least 25 students who took at least six honors courses and two AP classes.

high school just as qualified and able to compete for admission at a wide range of colleges. While students from these academically advanced programs have attained strong qualifications for college, these students face the harder task of taking advantage of those qualifications and enrolling in more selective colleges.

# Chapter 2

### The Issue: Substantial Mismatch Between Students' Qualifications and the Colleges in which They Enroll

Many students in academically advanced programs and schools, as we have demonstrated, have made an extraordinary leap in their qualifications and now face a unique challenge: being the first in their family to attend college. While nearly all these students hope to attend a four-year college and clearly have worked hard to demonstrate their abilities to succeed in competitive programs, many also come from families and communities where the resources necessary to engage in the complexities of college search and application are not readily available. Given their strong qualifications and the challenges they face, do these students end up in colleges that match their qualifications?

Figure 11 compares the college qualifications of graduates of academically advanced programs to their actual college enrollment in the fall after high school graduation, which is obtained from data from the National Student Clearinghouse (NSC).<sup>22</sup> What we observe is a significant mismatch between students' qualifications and their actual college enrollment in the fall after graduation. A significant proportion of these students (16 percent to 18 percent) do not enroll in college at all. Despite the fact that about 90 percent of these students have the qualifications to attend at least a somewhat selective college, giving them access to most public universities in Illinois, only about two-thirds enroll in these colleges. Just as surprising is the underrepresentation of these students in selective or very selective four-year colleges. While 64 percent of graduates of selective enrollment schools have access to a selective or

> There is significant mismatch between students' qualifications and their actual college enrollment.

very selective college, only 37 percent enroll in a selective or very selective college. We see similar gaps for graduates of IB programs (57 percent qualified versus 42 percent attending) and for graduates who had taken an AP sequence (63 percent qualified versus 39 percent attending).

How do we understand this mismatch between students' qualifications and their actual college enrollment? The rest of this report focuses on explanations for this phenomenon by investigating five areas in which academically advanced students face difficulty in college planning: (1) taking the basic steps necessary to apply to and enroll in a four-year college, (2) conducting an effective college search, (3) managing an accelerated—and complicated—college application

process, (4) handling the competing demands of their coursework and college planning, and (5) understanding how to finance a college education and effectively participate in financial aid application. The first challenge on this list refers to the basic benchmarks set forth in the "Potholes" report, and the following four challenges take a deeper look at the unique issues graduates of academically advanced programs face in meeting those benchmarks in a more competitive college admissions process.

### What Should Students Be Doing?

Before discussing the problems students encounter in college planning, it is worth asking: what *should* 

### Match Is Just One Component of Finding the Right College Fit

In this report, we focus on the concept of "match." Match describes whether a student enrolls in a college with a selectivity level that matches the kind of colleges to which a student would likely have been accepted, given his or her qualifications. Match is an easily quantifiable outcome. In this report, we often draw a distinction between the very selective "top colleges" (to which many graduates of academically advanced programs have access) and the less selective colleges (commonly attended by CPS graduates). Ultimately, however, finding the right college means more than gaining acceptance to the most competitive college that matches his or her qualifications. In reality, there is a wide range of colleges beyond those two groups, and a thorough college search will consider a range of colleges with a range of characteristics.

Finding the right college is about finding a place that is a good "fit": a college that meets a student's educational and social needs. Finding a good fit requires students to gain an understanding of what their needs and preferences are, and then to seek colleges that will best support their intellectual and social development. Finding a fit may also include taking into consideration whether colleges offer higher

graduation rates and/or better financial aid packages. Match, as we have defined it, is just one consideration of the larger process of engaging in an effective college search, but it is also an important indicator of whether students are engaged more broadly in a search that incorporates the larger question of fit.

In this report, we focus on students who enroll in colleges that match their qualifications, but it is clear from cases such as Moises and Grady that selectivity is but one of many factors students use in college choice (see page 28). Thinking about match is often a key starting point for organizing a college search. Thus, the selectivity of colleges students look to, apply to, and ultimately enroll in provides us with a window into whether CPS graduates are benefitting from their high school qualifications in a way that would best lead them to attain a four-year degree. In the end, understanding what drives many of the quantitative indicators we use in this report—the proportion of students applying to match schools and the proportion of students enrolling in a match college—is important in investigating more broadly whether students are receiving the kinds of support required to best maximize their college options and ensure they make a well-informed choice.

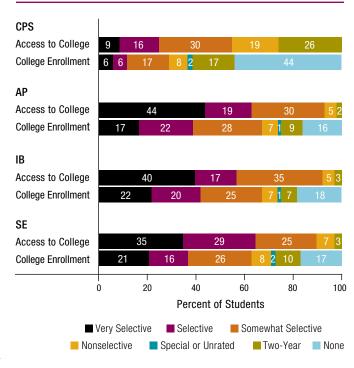
students be doing? As Moises and Grady illustrate (see page 28), preparing for college can be a long and complex process.<sup>23</sup> Achieving the high qualifications these young men needed to reach their goals took all of their high school careers to build. Just as important, however, was how these two young men organized their college search and application process during their junior and senior years of high school. Within a short time span, they had to make important decisions and meet a series of important benchmarks for the college search, application, and financial aid processes.<sup>24</sup> As Moises and Grady did so effectively, starting in junior year or even earlier, students must identify a list of colleges in which they might be interested. The summer after junior year should be a time of discovery and search. By fall of senior year, students should have gathered enough information to narrow their list of colleges to those where they intend to apply. In the fall of senior year, students should start working on college applications so they will have sufficient time to meet winter deadlines. By winter, students who are effectively managing the college application process should have completed their applications and started working on their financial aid forms.

As we will demonstrate later, the complexity of these application and financial aid processes will differ depending on the type of colleges students choose, and these processes present further challenges for students who are applying to more selective colleges. Students who apply to public or nonselective four-year colleges may simply have to take the ACT, fill out a few forms, send their transcripts to colleges, and pay an application fee. As we will discuss in greater detail later in this report, students who apply to top colleges, such as Moises and Grady, are required to complete complex, time-consuming applications that include essays on widely differing topics. They are also expected to effectively manage the financial aid process in time to meet winter deadlines, which often requires them to complete supplemental forms. In addition, students who apply to special programs and for scholarships may have to fill out additional applications.

Moises and Grady provide a best-case scenario for students with very high qualifications who effectively engage in the college search and application processes.

#### FIGURE 11

AP and IB students are less likely to attend colleges that match their high qualifications



**Note:** These numbers are from graduating classes of 2005 and 2006 and do not include students who were in special education or attended an alternative high school. Schools with AP programs are only included if they had at least 25 students who took at least six honors courses and two AP classes. "Special" and "Unrated" colleges are colleges that were given "Special" rating or were not rated by the 2005 Barron's college ranking system (for more information, see Appendix F).

They began with a broad list of colleges that included colleges from a range of selectivity categories. They narrowed down that list based on their own understanding of what they were looking for in a college and what different colleges might offer. They managed to apply to multiple colleges and manage complex applications. Finally, they effectively participated in the financial aid process, so that by late spring they could weigh their financial aid packages from various colleges, make final visits, discuss how to determine the best fit, and make final decisions with their families. If Moises and Grady were representative of what the college planning process looked like for the typical highly qualified CPS student, there would be little reason to write this report. Unfortunately, we found that Moises and Grady were the exception rather than the rule. Even top students struggle in college planning. The remainder of this report focuses on specific problems faced by academically advanced students and the challenges posed to the teachers, counselors, and high schools that serve them.

### Moises and Grady-A Case Study

### A supported and well-executed path to college

Securing admission to the right college and figuring out how to pay for it is a daunting and time-consuming process for even the most committed students, but the right road map and consistent support can make the difference between success and failure.

Two remarkable young men, Moises and Grady, C took this challenge on together, and their stories illustrate just how much effort is required for students to translate high aspirations into college attainment. They also illustrate that, in addition to academic qualifications and personal determination, students need strong parental support combined with structured support from high schools to undertake an extensive and effective college search. These best friends, the pitcher and the catcher on their varsity baseball team, were two of only five students in our longitudinal study of 105 students who left high school qualified to attend a very selective college, conducted a thorough college search, and then enrolled in the college of their choice. D

While these two young men were best friends, they were opposites in many ways. Moises, a firstgeneration Mexican-Puerto Rican, is easy-going with a confident smile that lights up a room. Grady is a driven and reserved African American teen from a supportive family who rarely smiles and speaks with the precision of a network news anchor. Moises, despite his academic performance, says he is "guilty of perhaps slacking off a little more than I should." Grady, on the other hand, was so intensely focused that his friends worried about the pressure he put on himself to succeed. Both young men shared a commitment to education and had dreamed of going to college for as long as they could remember. While neither student had parents who graduated from college, their families expected their sons to attend college. Both students also had parents who worked in professional settings and knew how to work their social networks for important information about college, and Grady had two brothers who had gone on to four-year colleges.

Their drive to attend college started with the decisions they made early in high school. They chose to attend Kahlo High School, a high school with a record of sending graduates to good colleges, and applied to the rigorous International Baccalaureate (IB) program. Both students graduated in the top 10 percent of their class. Moises achieved a 4.6 weighted GPA and a 25 on the ACT; Grady achieved a 4.0 weighted GPA and a 27 on the ACT. This hard work made them eligible to attend a very selective university. It also distinguished them nationally from other top students. They both knew their hard work made them attractive college applicants. E As Moises explains:

"I know I can get into 95% of the colleges that I want to go to. But I want a full ride, or at least partial."

For Moises and Grady, the push for high qualifications was not only to get into good colleges, but to make sure that they could afford it. Grady said he wanted to attend a

"really good school, because they have a lot of money to offer, because they have so many alumni that are making a lot of money."

### Junior Year: Beginning their College Search and Making a List

Like other capable students, Moises and Grady started making a college list in their junior year. They decided that they wanted to attend a first-rate college together where they could play baseball. They picked Stanford and Rice as their top choices, selected after watching the College World Series. They were impressed by the baseball teams and researched the schools' academic

reputations. Not surprisingly, each student's college list expanded considerably when they began receiving information from colleges attracted by their high ACT scores. Moises was contacted by recruiters at Dartmouth and invited for a free summer visit. Grady also started exploring the University of Michigan because he and his father were fans of the football team.

#### Summer of Junior Year: Campus Visits

During the summer after junior year, successful students such as Moises and Grady start to hone their college preferences by visiting campuses. At the end of junior year, both boys hoped to take college trips to California and Texas. Neither student was able to visit any schools in California, but Moises and his family did visit Louisiana and Texas, taking a summer trip that included visits to Tulane, Rice, and the University of Texas. Moises fell in love with Rice, because the tour made him feel at home. By contrast, he felt intimated by large campuses and found the University of Texas too chaotic. Grady wasn't able to go on any college tours over the summer, and instead spent his time contacting college representatives. By the end of the summer, Stanford and Rice were still at the top of Grady's list. He also was seriously considering the University of Michigan, the University of California at Berkeley, the University of Texas, and the University of Illinois at Urbana-Champaign.

### Senior Year: Applications, Prioritizing Colleges, and Financial Aid

Senior year is the time to kick the college search into high gear, so Moises and Grady started zeroing in on favorite choices and began working on their applications. For both young men, senior year was the time to sort out what they really wanted out of college. Moises wanted the best of both worlds: a great academic program and a top-ranked Division I baseball team. In the fall, Moises applied early to Rice. Recruiters from a few smaller colleges called offering him admission and special scholarships.

Grady decided early in his senior year he did not want to pursue baseball in college, and instead concentrated on schools with top-notch business programs. Grady's list—which he divided into sure-thing schools,

good-match schools, and reach schools—included four California and two Texas schools.

Both young men relied on at least one adult at their school for one-on-one support as they made these critical decisions. Grady discussed his college list with the school counselor, whose office he visited every day during lunch so that he could get some work done in quiet. Moises looked to his baseball coach for guidance:

"My coach is probably the biggest person who has made college an important part of my life...he is trying to give [the baseball team access to] many programs to get us noticed by colleges."

Grady and Moises made college applications their highest priority, but it was a daunting task. They worked on applications during lunch and sometimes class. They wrote different essays for each application. They provided recommendations even when they were not requested. Moises proofread all of his recommendations, and when dissatisfied with the grammar of a math teacher's recommendation, promptly corrected the mistakes and returned it to her so that edits could be made before the recommendation reached his colleges.

By February 1, Moises had mailed off applications to ten colleges nationwide. By this time, Grady had completed six applications, and the University of Michigan was his top choice. When asked why, Grady said Michigan offered one of the strongest business schools in the nation and a loyal, committed alumni base, which he saw as particularly important for his future:

"If I have to take out loans or whatever, I'll pay it back. Because if I go to a good school like University of Michigan, it'll get me into doors where I can make money coming out of college."

Kahlo High School emphasized the necessary steps needed to finance college. While working on their applications, Moises and Grady also made sure they completed their FAFSA, scholarship, and institutional aid applications. They understood that a key step in the college application process is financial aid, and their high school emphasized this part of the process.

#### Finishing Senior Year: Making their Final Decisions

When Grady and Moises received their spring acceptance letters, there was mixed news about their top-choice schools. Grady was admitted to the University of Michigan, but Moises did not get into Rice. Grady was not accepted to Stanford or Rice, but with those few exceptions, both young men were accepted everywhere else they applied.

While Grady was committed to Michigan, the \$40,000 price tag was a deterrent. He and his parents had visited the campus, and everyone was excited for Grady to attend. He received federal financial aid but no other institutional aid. In the end, Grady and his parents decided that the significant burden of loans was a worthwhile trade-off for attending one of the best business schools in the country. Grady estimated he would be in debt at least \$60,000 upon graduation from college, but he believes the university will offer him the tools and resources he needs to pay this debt in the future.

Moises had a difficult decision to make, weighing his options among colleges and the financial aid packages they offered. He was offered a full ride to Truman State University in Missouri. He visited the University of Illinois and the University of Michigan but decided that both campuses were too large. His visit to a small, selective, in-state liberal arts school was definitive. He immediately felt at home and got personal attention from the baseball and soccer coaches and the admissions staff. After a day visiting the campus, Moises felt completely comfortable, easily finding classes he wanted to visit and giving directions to other prospective students:

"...there were two students from [a different CPS] high school and they were like, 'Do you know where the admissions office is?' and I was like 'Actually I'm just a prospective student touring but...yeah I do.' So I'm already getting the hang of it."

Moises decided to attend this school despite not receiving as much financial aid as he hoped:

"They are giving me \$40,000 all four years, but it's still going to cost me about \$20,000 a year, so I am trying to get it down to at least \$15,000. Truman was giving me the most, like \$12,000 a year. Michigan is giving me \$20,000 over four years...but that was pretty good because U of I only gave me \$4,000 for four years."

### Success with a Caveat: Thriving at College but Stretched Financially

Moises and Grady ultimately ended up achieving what would be for many CPS students an unattainable goal: they finished high school highly qualified for college and they enrolled in good colleges, an alarmingly rare outcome in CPS, especially among minority males. Their ACT scores placed them in the top 10 percent of national test-takers and they graduated at the top of their class. They had the family and school support needed to apply to a wide range of colleges and ultimately ended up in colleges that matched their qualifications and offered them the college experiences they desired. At the same time, their college decisions would stretch them and their families financially.

Despite having the qualifications and characteristics that should have made them among the most highly recruited students in the nation, neither received a strong aid package from their top-choice colleges. However, because Moises and Grady and their families placed a high value on education, they were willing to make the sacrifices needed to pay for college. Ultimately, they both wanted to take full advantage of the doors opened by their hard work and academic qualifications, and attain their aspirations of receiving a degree from an elite college. Both young men made a successful transition to college; they enrolled in the schools they had planned to attend, moved into dorms, found clubs and extracurricular activities that suited them, made new friends, and delved wholeheartedly into their new academic careers with the same ambition and eagerness that made them each such a success.

#### Challenge 1

### Taking the Steps Necessary to Enroll in a Four-Year College

Our previous research found that many urban students have difficulty taking the basic steps needed to effectively apply to and enroll in a four-year college, including public universities with relatively simple applications. Other researchers have had similar findings.<sup>25</sup> Avery and Kane (2004) compared seniors with similar aspirations who attended Boston Public Schools (BPS) and suburban high schools in the Boston area. They found dramatic differences in the extent to which students in these two samples had taken the steps necessary to apply to college. For example, only 54 percent of the BPS sample versus 91 percent of the suburban sample had procured an application for the college they thought they were "most likely" to attend by the fall of their senior year. Cabrera and LaNasa (2001)—using a nationally representative sample, the National Education Longitudinal Study (NELS) also found that, among students qualified for college, those from economically disadvantaged backgrounds were less likely to apply to and enroll in four-year colleges than their more advantaged peers. Also using the NELS, Plank and Jordan (2001) found that differing rates of college-going among students from different socioeconomic backgrounds could largely be explained by differences in levels of information, guidance, and "critical actions taken" toward college enrollment. The findings from our own research were very similar.

In our analysis, we drew on data from the CPS postsecondary tracking system and the Consortium on Chicago School Research (CCSR) senior surveys to follow all CPS students as they progress through the college search and application process, just as we did in the "Potholes" report (see Appendix A for a description of our data). Beginning in April 2005 CCSR administered surveys that asked seniors about their educational aspirations and whether they planned to attend a two- or four-year college in the fall. Near the end of the 2005 school year, students also completed CPS Senior Exit Questionnaire (SEQ), which asked whether they had applied to a four-year college and been accepted. In addition to these survey data, we

use college enrollment data from the National Student Clearinghouse (NSC) to determine whether students ultimately attended college and, if so, what types of colleges. Because not all colleges participate in NSC's enrollment verification program, we adjust our enrollment numbers for this undercount (see Appendix G for a description of this adjustment).

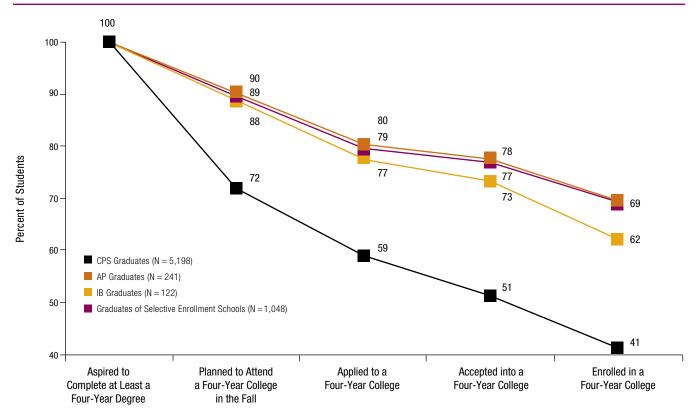
Because we combine datasets and limit our analysis to students for whom we have each piece of information, our sample is much smaller than the CPS graduating class of 2005 (see Appendix A for a description of our data and sample). We also limit our analysis to students who aspired to attain at least a four-year degree. Our resulting sample, then, is significantly more qualified than the broader population of CPS graduates. Because our sample is higher performing, on average, than the larger graduating cohort, we expect we are overestimating the proportion of CPS students who meet specific benchmarks of participation in the college planning and application process.

To better understand the complicated process that leads to enrollment in a four-year college, we divided the process into critical benchmarks. Figure 12 examines the percentage of students in academically advanced programs in our sample who aspired to attain a four-year degree and completed these various steps in college plans, application, and enrollment. Specifically, each point on the line graph shows the percentage of students in each group who: (1) planned to attend a four-year college immediately after high school, (2) applied to a four-year college, (3) were accepted at a four-year college, and (4) enrolled in a four-year college. Students are included at each point only if they reached the previous benchmark.

Notably, for CPS as a whole, only 72 percent of CPS students who aspired to attain a four-year degree planned to continue their education in the fall after graduation and only 59 percent applied to a four-year college. These were key findings of the "Potholes" report. Students in academically advanced programs do a significantly better job than their CPS classmates in navigating the road to college, but they still struggle. Given the qualifications of students in these programs, it is quite surprising how many students in academically advanced programs do not apply to a four-year college: approximately 10

FIGURE 12

Of students who aspired to attain at least a four-year degree, IB students are less likely to enroll in college than students in selective enrollment schools and in AP



**Note:** Data are from the graduating class of 2005 and are limited to students who said they aspired to attain at least a four-year college degree on the CCSR 2005 Senior Survey. Lincoln Park data are excluded because we cannot publish school-level survey data. College enrollment

rates were adjusted for CPS graduates who may have attended a college not participating in NSC's enrollment verification program. Schools with AP programs are only included if they had at least 25 students who took at least six honors courses and two AP classes.

percent make an early decision not to attend a fouryear college, and approximately one-fifth never apply to one. Jennie (see page 33) provides an important example of how a successful and committed student can ultimately opt to attend a two-year college, even when receiving positive messages from family members about attending a four-year college. In the absence of structured support or guidance from adults at their schools or from other role models who could shepherd them through the postsecondary process, many highly qualified students, like Jennie, struggle to complete this basic step toward four-year college enrollment.

Not surprisingly, given their qualifications, nearly all academically advanced students who apply to a four-year college are accepted. Yet, we also find that among students who are accepted, many—particularly IB students—do not enroll the next fall. Of the 73 percent of IB students who report that they are accepted at a four-year college, only 85 percent enrolled

in a four-year college the next fall—leaving a total of 62 percent of IB students following the steps and enrolling in a four-year college.

Why would students who are accepted at a four-year college not enroll? We looked carefully at this question in our "Potholes" report. There are many factors that shape whether students are able to translate acceptance into enrollment, but we found financial aid to be particularly important. There is an increasing awareness that the complexity of the federal student aid system—particularly the Free Application for Federal Student Aid (FAFSA)—poses a significant barrier for low-income students.<sup>26</sup> This report found that not submitting a FAFSA was a major predictor of whether CPS students who were accepted at a four-year college ultimately enrolled. Among students who had been accepted to a four-year college, 84 percent of students who completed a FAFSA attended a four-year college in the fall, compared to only 55 percent of students who

# Jennie-A Case Study

# Paralyzed by the fear of choosing the wrong college

Why do some students take themselves out of the four-year college planning process? Does this only happen to students with low grades and test scores? Jennie, a student with strong qualifications for college, shows some common features of college aspirants who made an early decision to attend a two-year college.

Making the right choices about college can seem like a terribly risky venture, even for very smart young people. Jennie, H a Chicago-born Latina, is an extremely bright, hard-working student who completed a rigorous IB program at Silverstein High School. She was a candidate for 12-year perfect attendance, maintained a cumulative weighted GPA of 3.84, and scored 21 on the ACT. Jennie was also involved in cheerleading, drama, science club, debate team, and the National Honor Society. She was thinking about majoring in theater in college but also considered law. She seemed a little embarrassed by her career preference, saying, "This may sound stupid, but I want to go into acting."

Jennie lived with her mother, father and older brother. Although her parents never attended college, her older brother attended a local community college, and several members of her extended family had some college experience. Her parents supported her college goals and consistently pushed her to attend a four-year college.

#### Junior Year: Searching for the Right Path

Managing the college search process left Jennie feeling overwhelmed and confused. The whole process seemed risky and stressful. She worried incessantly about college costs and feared she would waste her family's money if she ended up in the wrong college. Like many students, she was also convinced she needed to decide on a career before she could select colleges. These two ideas contributed greatly to her stress in searching for the right college:

"That's pretty much how you're spending the rest of your life . . . so I find it's a pretty big decision."

Jennie experienced "sticker shock" when she considered the costs of four-year colleges. Her father was paying for her brother to attend a community college, and Jennie knew that those costs would pale in comparison to the costs of the four-year schools she considered attending. She feared further burdening her family financially:

"They are only paying because it's a good community college. It's only \$6,000 a year... compared to some of the other colleges, that's nothing."

Jennie also seemed to lack any broad understanding of the kinds of colleges to which she could apply. The only college she could name was Columbia College (in Chicago, a nonselective four-year school), because she had seen a presentation by college representatives at her high school and learned that Columbia had a fine arts program. Jennie wasn't talking to anyone at her school about the search process, although she said her counselors stressed the importance of the ACT. The science club visited the University of Illinois at Urbana-Champaign, but Jennie said she didn't like the campus.

#### Fall Senior Year: Overwhelming Confusion and Anxiety

In her senior year, Jennie's college search never really got off the ground. Her college application activities were unfocused and disorganized, which left her feeling incredibly anxious. Jennie gathered some college information on her own. She attended her school's mandatory college fair and received some e-mails from colleges, but she lacked any guidance on how to structure an organized search of four-year colleges. She talked often with family members about the strengths

and weaknesses of various community colleges in the area, even as they were discouraging her from attending such schools. She relied largely on the Internet for information, and became interested in DePaul University after learning about its theater program on a website. She thought DePaul was a good fit, because she could fall back on other majors if drama didn't work out. Jennie seemed paralyzed in searching for schools and by fall of senior year reported that she had not talked to a single teacher or counselor about her plans.

"I have no idea. I want to go to college, but I'm at the point [where] I don't know what I want to be. I don't know what I want to do."

#### Winter Senior Year: Finding a Low-Risk Solution

Jennie did apply to DePaul, but decided early in the winter of her senior year that it would be best to start off at Moraine Valley Community College. The sudden decision to go to a two-year school was a fairly common phenomenon, especially for students at Silverstein, even for students with strong college qualifications like Jennie's. Jennie just didn't know what to do with her life:

"Figuring out what I want to do, that's my problem ... I might as well just go to a community college... Everyone kept telling me, 'You don't have to worry the first two years about what you want to do, because it's all the same [classes].' I just have to make sure the credits will transfer."

Jennie's family was unhappy with her decision to attend a two-year college:

"[My mom and brother] say that I worked too hard these four years with IB, and I can do better than that. But I don't know. I say, I'm saving them money."

#### Spring Senior Year: Sticking with Her Plan

Jennie's father was paying for his older son to go to community college, and Jennie was insistent that she not take out any student loans. She ultimately was accepted to DePaul, but completely ruled out that idea when she saw her financial aid package included \$10,000 in loans. Her father finally relented: "My dad didn't want to do any of the loans." It is unclear whether Jennie ever filled out her FAFSA application. Her acceptance letter from Moraine Valley asked her to complete a financial aid application, but she still couldn't answer questions about financial aid. She couldn't say for sure whether or not she had filled out a FAFSA and couldn't describe what the process entailed.

At the end of senior year, Jennie admitted that her college application process could have been better guided and executed. She said part of the problem was that she was pushed by her teachers to complete her highly challenging culminating projects for her IB coursework, but not pushed by anyone at school to complete her college applications. In fact, Jennie never spoke one-on-one with a teacher or counselor about her college plans:

"I needed to be pushed more. In the IB program, with all the homework and everything else, I was more focused on that than trying to apply for college. [Applying to colleges] would be on my weekends if I had time."

By the end of her senior year, Jennie wasn't sure she had made the right choice to attend Moraine Valley, but at least it was a choice that didn't seem risky. By the fall after graduation, Jennie was enrolled at Moraine Valley, though she was worried she might have to transfer to a City College due to cost. Even though she said that college was easier than high school, Jennie said she was enjoying her classes, professors, and college experience at Moraine Valley.

did not file a FAFSA. This strong association holds even after we control for differences in student characteristics and support for college planning. Students who completed a FAFSA and had been accepted to a four-year college were more than 50 percent more likely to enroll than students who had not completed a FAFSA by spring.

We see a similar pattern in college enrollment for FAFSA completers and non-completers among students in academically advanced programs, even though the percentage of students in academically advanced programs who report completing a FAFSA is higher than in the CPS general population. Nearly 90 percent of students in academically advanced programs who completed a FAFSA and were accepted to a four-year college ultimately enrolled in a four-year college by the fall after high school graduation. Of students who did not complete a FAFSA and were accepted to a four-year college, only 50 percent of students in IB programs enrolled in college. Thus, while there are many reasons that CPS students may have difficulties translating their acceptance into enrollment, FAFSA completion appears to be one of the main determinants. Among students in academically advanced programs, not all students who were accepted into a four-year college had completed their FAFSA.

In summation, a first step in translating students' qualifications into college enrollment is for students to successfully manage the basic steps toward college enrollment. We find that students in academically advanced programs, while highly qualified, are not immune to difficulty in completing these steps: only about 80 percent of these students ever applied to a four-year college, and many students who are accepted ultimately do not enroll.

A first step in closing the qualifications/enrollment gap for students in academically advanced programs is getting students to effectively participate in applying to four-year colleges. As seen in Figure 11, despite the fact that nearly all of these students are qualified to attend a four-year college, only approximately three-quarters enrolled in four-year colleges. Thus, highly qualified, first-generation college students face similar difficulties in meeting the benchmarks leading to four-year college enrollment as their less-qualified classmates.

Improving students' academic qualifications does not alter them coming from families with parents who did not attend college, and some students may have difficulty in managing the basic college application process. However, Figure 11 also dramatically demonstrates that getting these students to successfully navigate the basic four-year college application process is not enough. They are in a unique position of having access to more selective four-year colleges. The following sections of this chapter focus on specific problems encountered by students in academically advanced programs when they attempt to enroll in four-year colleges that match their qualifications.

#### Challenge 2

### Conducting an Effective College Search

In order to enroll in colleges that "match" their qualifications, students in academically advanced programs must do more than enroll in any four-year college and need to do more than just meet benchmarks. They must be able to effectively participate in the vastly more complicated and competitive search and application process demanded by more selective colleges. This begins with college search. An effective search for more selective colleges, as Grady and Moises illustrate, must begin with a list of potential colleges and a framework for how to choose among them. This is an intimidating process for any student; there are more than 2,500 four-year colleges in the United States, including more than 100 in the state of Illinois. This is a particularly daunting process for first-generation college students who may not have access to information in their home or community about how to effectively identify what kinds of colleges they might like to attend, the range of options that are available to them, and how much they will be expected to pay for college-especially what they can expect to pay net of financial aid.<sup>27</sup>

The case of Clara provides an important example of how students in academically advanced programs confront the distinctive challenges of the college search. Though Clara was exceptionally well qualified for college—class valedictorian with nearly straight As in her IB program—she never expressed interest in a single college that matched her high qualifications. It

# Clara-A Case Study

# Making her hard work pay off all by herself

Can it be assumed that smart, motivated students can manage the postsecondary planning process just fine on their own? Clara shows that, when it comes to college planning, even the best students in a school can go almost unnoticed by adults.

From the first semester of her freshman year until  $\Gamma$  the day she walked across the stage at graduation, Clara was the one of the top students in her class at Ellison High School. She graduated from the International Baccalaureate program with a weighted GPA of 4.7 and an ACT score of 24. Her stellar high school performance afforded her the opportunity to attend not only a very selective school, but almost any college or university in the country. Clara's teachers confirmed her academic ability. Her English teacher described her as: "A rare individual. The only problem or weakness I see in this student is the pressure she places on herself." Her math teacher said: "She has extremely high expectations of herself and has a strong work ethic that allows her to meet her high standards. At the same time, she always helps her peers." Clara was a prolific writer of fiction and poetry, for which she won numerous awards, including some scholarships. In the minds of her teachers, peers, and family, there were few doors not open to this remarkable young woman.

Clara lived with both her parents and younger sister. Although Clara's parents, who are of Puerto Rican descent, had virtually no experience with college, Clara made it clear her mother was her greatest ally in college planning. Clara's mother insisted that Clara attend a "good school," but neither Clara nor her mother was sure what schools would be included in such a list.

#### Junior Year: An Active but Uninformed College Search

During the spring of her junior year, Clara was clear about her intent to go to a four-year college, but had a hard time describing her ideal college. She did, however, know that she wanted to stay in Chicago and live at home and that she preferred a small college. And while Clara had never taken an art class in high school, she

wanted to study art and design. When asked why she said:

"I'm not really sure what [graphic design] consists of. I just know it's like you're designing. There's this website and you make your own pages with all these codes, and I did it and I liked the results. And that's why I really want to go into graphic design."

By the end of junior year, Clara's plan was to study art or design at a school where she could take a variety of courses. A teacher had encouraged her to attend a more comprehensive college than the Illinois Institute of Art. Clara liked this idea, because it would allow her to experiment with different kinds of courses. In the end, though, her list of colleges was the same as many of her less qualified peers, including schools like Northeastern Illinois University, the University of Illinois at Chicago, and Loyola University. Clara wasn't excited about attending any of them.

#### Summer: Doing Her Research Campus by Campus

Clara's mother was as active as Clara in the process of college search and selection. Every time Clara mentioned a college that she was interested in attending, her mother insisted on driving to the campus for a tour and even sitting in on classes. Clara and her mother visited several colleges over the summer and Clara completed a week of classes at the Illinois Institute of Art.

#### Fall Senior Year: Making Up Her Mind

In the fall of her senior year, Clara continued a college search that was extensive, but not well-directed. Clara spoke casually with her teachers about her college plans but had not spoken with a counselor or had a serious conversation about her college choices with any educator at her school. Clara reported an incident in the counseling office when she was trying to figure out the difference between official and unofficial transcripts

"Everyone's so grouchy... in the [counseling] office. I guess I can understand, because they wouldn't remember one single application, but I don't know... they could be more approachable."

Clara invested significant time and energy in completing applications to about eight schools. Many of Clara's peers in the IB program struggled to balance the demands of rigorous IB culminating projects and the college application process. Clara got everything done on time—even submitting applications for Loyola University and Columbia College by the early-priority deadlines—without her school work suffering. In the fall, Clara said she planned to attend Columbia College in Chicago for sure. She toured the school, enjoyed the atmosphere and downtown location, and knew she could study graphic design.

#### Winter Senior Year: Changing Her Mind

During her winter interview, Clara said she changed her mind and decided to definitely attend Loyola, again based largely on having toured the campus and sat in on a class there, which she enjoyed. She was accepted to Loyola and Columbia, and Loyola offered her a merit-based scholarship to cover some of her tuition. Though Clara had no problem completing her college applications, she was overwhelmed by the process of applying for financial aid. She was familiar with tax documents because she helped her parents complete their forms, but she was confused by certain questions on the FAFSA. Clara was confident she'd figure it out and complete her financial aid applications by April or May. She never met with a counselor.

#### Spring Senior Year: Changing Her Mind Again

Clara changed her mind about which college to attend one more time before graduation, and finally planned to attend a small, in-state liberal arts school ranked as somewhat selective. K Spring of her senior year was the first time she ever mentioned this school:

Interviewer: [That school] is not on this list. Last time you said Loyola, UIC, and Columbia . . . [laughing] What happened?

Clara: [Laughing] [My mom and I] passed by the school, and I'm like, 'This is a nice school. What is that?' So my mom started looking up stuff. She [told me], 'I think you'd like this school.' And so we looked at it, the web page and then we signed up for the tour. I really love this school.

Clara was one of the top five students in her graduating class, but she never considered applying to a very selective college. Apparently, no one steered her to one, either. Her teachers recognized that she was a remarkable young woman, but she never spoke to a counselor and never seriously discussed her plans for the future with any adult at her school.

Not surprisingly, Clara was accepted at all the institutions to which she applied. Though her confusion over financial aid looked like it might have been a serious stumbling block when she discussed it in February, Clara ended up figuring out financial aid, and, presumably with the help of her new college, she did end up receiving enough federal, institutional, and private scholarship money to make her college education affordable for her and her family.<sup>L</sup> Clara's IB coursework and test scores helped place her into advanced freshman courses at her college. In the fall, she was thoroughly engaged as an English major and very happy with her college choice.

With the help of an exceptionally involved parent, Clara managed to find her way to a school that made her feel at home, took care of her as a first-generation college student, and promised to support her academic ambitions throughout college. It is also apparent that this choice was arrived at through no small amount of luck, with Clara and her mother accidentally happening upon a college that proved a good fit for Clara. With such limited guidance from her school, it is easy to imagine how Clara's story might not have had such a positive ending.

appeared that no one at her high school ever suggested such a college to her. Given her qualifications, her narrow college search is surprising. However, when seen through the lens of the social capital available to her for completing a college search, it is easier to understand. As described in the demographics section of this report, students in academically advanced programs are not substantially more likely than other CPS students to come from advantaged backgrounds. In fact, students in the IB program are no more likely than the average CPS student to have a college-educated parent or to come from a neighborhood with a lower concentration of poverty or greater socioeconomic status. If a student's college planning process relies to some extent on the norms, information, and support for college planning embedded in social relationships, then it is easier to understand why Clara never considered attending a very selective college. In the absence of guided support from her high school, she was unlikely to learn about more selective college options from her family or community. In short, Clara's search was largely unguided and almost random. Hers is an extreme example, but she is not an isolated case.

Students who struggle to identify an appropriate list of colleges and develop an approach for choosing among them can often default to their own information networks, which gear them toward colleges within CPS's traditional feeder patterns. Jennie also had a difficult time building a list of colleges that were of interest to her. Like Jennie, many students fear making the "wrong" college decision and will, in turn, focus their search on the better-known colleges that draw large numbers of CPS graduates.

With their strong qualifications, the students we examine in this report are in a good position to cast a wider net in their college search than their less-qualified peers—to seek out colleges outside of the usual list that are not only a good match for their qualifications but also a good fit for their interests and values. Students like Clara seem to struggle with their college search right from the beginning—they lack the information and guidance to perform a college search that results in a list of appropriate schools. As we will discuss in the next section, not all students who make appropriate lists of colleges end up *applying* to these schools.

#### Challenge 3

# Managing an Accelerated and Complicated College Application Process

Applying to match colleges means that academically advanced students will consider colleges beyond the less selective public universities that would be better known to the typical CPS student. There is evidence that first-generation and low-income college students struggle to apply to more selective colleges and universities.

Three important studies have identified this significant problem of under application to top-tier colleges among low-income, highly qualified students. In their investigation of the underrepresentation of low-income students at top-tier private institutions and flagship state universities, Pallais and Turner (2006) found that low-income students were less likely than their more advantaged peers to apply to such selective institutionsespecially to top-tier liberal arts colleges—even if they have the same SAT scores. Koffman and Tienda (2008) examined application data for the University of Texas at Austin and Texas A&M University to examine what impact Texas's "Ten Percent" law had on the applicant pool for Texas's two flagship state universities.<sup>28</sup> They found virtually no evidence that this policy encouraged more low- and moderate-income seniors to apply to these schools. For graduates of all but the most affluent high schools in the state, rates of application among students in the top 10 percent of their graduating class either remained relatively stagnant or actually decreased in the years bracketing the policy shift (1994–2003). Similarly, Avery et al.'s (2006) evaluation of the first year of Harvard's Financial Aid Initiative—which explicitly stated that Harvard would be cost-free to students whose parents earned less than \$40,000 per year—discovered that though the initiative did attract more low-income applicants to Harvard, there remained a group of students who were qualified to attend Harvard but did not apply. These "missing applicants" came disproportionately from high schools that had a limited history of sending students to private or selective colleges.

These studies indicate that the problem of nonapplication to top schools among low-income or firstgeneration college students is complex, and no easy answers emerge from these findings. The traditional interpretation of studies like these is that students do not know their college options and do not consider applying to more selective schools. Our qualitative research, however, suggests that awareness is only part of the problem. Even if students consider applying to these schools, they face additional barriers—complicated applications, competing demands, and a poor understanding of financial aid—that often prevent them from filing applications. The rest of this section outlines each of these problems and illustrates how they result in limited applications being submitted to match colleges. Indeed, while the case of Clara illustrates a compelling problem of lack of awareness, our qualitative work suggests that an equally important problem is students who had a greater awareness of their options and planned to apply to a wide range of colleges but did not follow through by submitting applications.

It was common for students in our qualitative study to make initial lists of colleges that included several match colleges and several colleges outside of traditional feeder patterns. But as application time drew nearer, the students narrowed their lists to a much smaller number of mostly mismatch colleges or the most commonly attended colleges. Hector, an ambitious IB student who loved science and wanted to go to medical school, illustrates this pattern of narrowing although his outcome was ultimately positive. When he was interviewed during his junior year, his college list was long and impressive: he made a list of more than ten colleges he was interested in applying to, including the University of Chicago, Northwestern, Yale, Harvard, and MIT. He was even considering using his IB diploma to attend college overseas. By the fall, he was strictly focused on his University of Chicago application; though he still wanted to apply to some colleges out-of-state, he had yet to do so. Eventually, he only applied only to the University of Chicago and Loyola, giving up on his early ambition to get into an Ivy League college. He eventually enrolled in the University of Chicago, which was both a good fit and a good match for him. But other students who do not follow through on their ambitious college application plans do not have such a good outcome. Sabrina, a highly qualified AP student profiled in the "Potholes"

report, saw her long list of selective colleges—including Pomona, Duke, the University of California at Berkeley, and Yale—shrink down to just one college application. She did not enroll in any college in the fall. If college match was a consideration in students' college search process, we would expect that students would apply to multiple match colleges in order to maximize their options, but this did not appear to be the case among students we interviewed. Only a few students in our qualitative sample—including Moises and Grady—submitted applications to more than one or two colleges that matched their qualifications.

Thus, the problem of college mismatch for the students we interviewed did not appear to be exclusively driven by a lack of awareness of college options, as it appeared to be for Clara or Jennie. Some students lacked any real information about more selective college options, but most were aware of at least one or two colleges that matched their qualifications. Typically, the problem was that they applied to just one match college or to none at all. How could it be that such hard-working, ambitious students would constrain their college lists in this way? While there are many possible reasons for this phenomenon, one of the most important we found was the problem of the time required to complete more complex applications combined with other competing demands. We ask first: how is applying to more selective colleges different from applying to less selective colleges?

# Applying to Selective College Means More Work and Less Time

To investigate this question, we have constructed a hypothetical list of colleges to which a typical CPS student might apply, as well as a hypothetical list that could be drawn up by a well-qualified student in an academically advanced program. The schools on these lists represent a range of possible college options for students. A typical CPS student with the qualifications to attend a somewhat selective college might make a list that includes some public institutions commonly attended by CPS graduates—in-state public universities that are somewhat selective and nonselective, as well as one somewhat selective private college (Table 5A). By comparison, a student in an academically advanced

TABLE 5A
College Admissions Requirements: Typical List

College	Northeastern Illinois University	Eastern Illinois University	Aurora University	University of Illinois at Chicago	Southern Illinois at Carbondale	
Туре	Public Non-Selective	Public Somewhat Selective	Private Somewhat Selective	Public Somewhat Selective	Public Somewhat Selective	
Admissions Deadline(s)	July 1; No Early/Priority Deadlines	No Admissions Deadlines	No Admissions Deadline; May 1 Priority Deadline	January 15; No Early/Priority Deadlines	No Admissions Deadline; May 1 Priority Deadline	
Tests Required and Recommended	SAT or ACT (writing optional)	SAT or ACT (writing optional)	SAT or ACT SAT or ACT (writing optional)		SAT or ACT (writing optional)	
Essay(s) Required	None	1 Personal Statement	None	1 Personal Statement	None	
Letter(s) of Recommendation Required	None	None	None None		None	
Financial Aid Deadline(s)	February 28 Priority; No Strict Deadline	March 1 Priority; No Strict Deadline	April 15 Priority; March 1 Priority; No Strict Deadline No Strict Deadline		May 1 Priority; No Strict Deadline	
Financial Aid Document(s) Required	FAFSA, Institutional Form	FAFSA	FAFSA	FAFSA	FAFSA	

**Note**: Information on college admissions requirements was gathered from the College Board website, the Common Application website, and the websites of the schools listed. The requirements in this table are reflective of the applications for 2009 seniors, but

should not be used for college planning purposes. Admissions requirements do change slightly from year to year, so these may be slightly different from the requirements faced by students in our qualitative study or those faced by students in coming years.

program with qualifications to attend a very selective college might consider expanding her college search to private and/or out-of-state colleges (Table 5B).

Two differences in this list stand out: (1) much earlier and more complicated application deadlines for admission and financial aid and (2) far more complex and demanding application requirements. A student applying to the colleges on the typical list has a fairly straightforward set of deadlines: most colleges have an open or rolling admissions policy and do not have strict deadlines for financial aid. The time frame required by more selective colleges is not so forgiving or so clear. First, several of these colleges have strict application deadlines in January or February. Second, some colleges have a range of application options—Priority and Early Decision, Early Action, or Fast Track options—that are not common among the typical colleges. Finally, most of these colleges have very early financial aid deadlines. It is important to remember that students in AP and IB programs typically attend high schools where only a small fraction of students are qualified to consider colleges on our selective list. As a result, college planning programming offered by their high schools is more likely to be organized around the typical time frame rather than this accelerated one.

Students applying to more selective colleges may also find differing requirements for standardized tests. Colleges on the typical list have a consistent set of test score requirements; students can submit either the SAT or the ACT, with the writing portion being optional. Students applying to schools on the selective list must wade through more details about standardized tests. For example, the University of Illinois says it will consider the SAT subject tests. Knox College provides a complex description of tests it will consider if submitted, but what students might not realize is that submitting standardized test scores of any kind is, in fact, optional at Knox. Thus, students in academically advanced programs have to make decisions about which tests are necessary well in advance of their application

TABLE 5B
College Admissions Requirements: Selective List

College	Loyola University	University of Illinois Urbana-Champaign	Grinell College	University of Chicago	Knox College
Туре	Private Selective	Public Very Selective	Private Very Selective	Private Very Selective	Private Selective
Admissions Deadline(s)	No Admissions Deadline; April 1 Priority Deadline	January 2; November 10 Priority Deadline	January 20; November 20 Early Decision	January 1; No Early/Priority Deadlines	February 1; No Early/Priority Deadlines
Tests Required and Recommended	SAT or ACT (writing optional)	SAT (subject tests considered) or ACT (writing required)	SAT or ACT (writing optional)	SAT or ACT (writing optional)	Considered if Submitted: SAT Reasoning and Subject Tests; ACT (writing optional)
Essay(s) Required	1 Writing Sample	2 Short Essays	1 Personal Statement or Essay	2 Short Essays (1 required 1 optional); 1 Long, Unique Essay	1 Short Essay; 1 Common Application Essay
Letter(s) of Recommendation Required	None	None	2 Core Academic Teachers	1 English or Social Studies Teacher; 1 Math or Science Teacher	1 Teacher Evaluation
Financial Aid Deadline(s)	March 1 Priority; No Strict Deadline	March 15 Priority; No Strict Deadline	February 1	February 1	February 1
Financial Aid Documents Required	FAFSA	FAFSA	FAFSA; Institutional Form; 1 Supplement	FAFSA; CSS Profile; Institutional Form; 2 Supplements	FAFSA; Institutional Form

**Note**: Information on college admissions requirements was gathered from the College Board website, the Common Application website, and the websites of the schools listed. The requirements in this table are reflective of the applications for 2009 seniors, but

should not be used for college planning purposes. Admissions requirements do change slightly from year to year, so these may be slightly different from the requirements faced by students in our qualitative study or those faced by students in coming years

deadlines—which, for these students, means that fall of their senior year might be too late.

Once the testing is completed, the applications themselves are far more intricate. Colleges on the typical list do not often require teacher recommendations or evaluations, and few require that students submit some sort of essay. By comparison, several colleges on the selective list require recommendations, sometimes with very specific instructions about who must submit them. In addition, the selective colleges all require a personal statement, short essay responses, or a writing sample. The stories of Moises and Grady give us a more detailed picture of the time and energy required to apply to a long list of selective institutions. Their road to college was an arduous one that required hours of concentrated work—writing essays; documenting

extracurricular activities; and organizing applications, writing samples, resumes, teacher and counselor recommendations, and transcripts.

Finally, students applying for financial aid at these colleges may find the process more complex at these colleges than at those on the college list of a typical CPS student. In addition to filing the confusing FAFSA, they may be required to fill out additional financial aid forms (e.g., the college's own institutional application for financial aid or the CSS PROFILE, which is slightly different from the FAFSA). Filing all these extra financial aid forms is of concern for these students, not only because it is time-consuming and complicated but also because the forms need to be completed very early to meet January and February admissions and financial aid deadlines. These deadlines

### Moises and Grady's Road to College

In their college search, Moises and Grady, the two students profiled at the beginning of this chapter, created an impressive list of colleges. Ultimately, Grady applied to six colleges and Moises applied to ten. What did it take to complete these applications? Colleges are increasingly using the Common Application which is designed to streamline the application process.<sup>M</sup> In addition to the Common Application, many colleges require a supplemental form. When applying to Rice, for example, a student must fill out a Common Application supplement that asks additional background questions, questions on AP, honors and IB coursework, questions on summer activities, and also requires three additional essays. Whether using the college's own application or the Common Application and its supplements, students were typically asked to respond to two or three writing prompts, some short, some long. Therefore, even if applying mostly to colleges that use the Common Application, students applying to as many colleges as Moises and Grady did must complete many essays. Though students can count on at least some overlap, we estimate that at a bare minimum, Moises wrote at least seven completely distinct, long

essays and eight additional short responses; Grady said he wrote at least ten essays.

In the end, Grady filled out the Common Application, four supplements, and two additional applications for those colleges that did not accept it, including Stanford's ten-page application with an additional 14 pages that must be submitted to teachers and counselors for recommendations and school reports. Moises filled out the Common Application, two supplements, and six additional applications to colleges that did not accept the Common Application, including the "Uncommon Application" at the University of Chicago.

Colleges that do not accept the Common Application often have quite extensive essays. The University of Chicago's is noteworthy. When applying to the University of Chicago, Moises first responded to two fairly predictable short essays:

Question 1: How does the University of Chicago, as you know it now, satisfy your desire for a particular kind of learning community and future? Please address with some specificity your own wishes and how they relate to Chicago.

at more selective colleges are often far earlier than even priority admissions deadlines to less selective colleges and far earlier than the June 30 deadline stated on the FAFSA website.

The Impact of More Complicated Admission Requirements

Many students in our qualitative study identified how these more complicated applications and requirements hampered them in effectively applying to the colleges they hoped to attend. Sakaarah, a highly ambitious IB student profiled in the "Potholes" report, spoke of the importance of early admissions—as well as how few of her peers seemed to be aware of the process:

"I would like [the school staff] to once or twice a week in the beginning of the year—maybe even junior year—[provide] help, because a lot of people don't even apply early decision, and that's the way you really get in. They should really stress that, and maybe once a week make all the seniors meet in the auditorium and discuss college—things we should be doing—and stress the fact that early decision gets you scholarships. A lot of kids don't even get in if they don't apply early decision. So that should be stressed... It's really first come, first served."

Question 2: Would you please tell us about a few of your favorite books, poems, authors, films, plays, pieces of music, musicians, performers, paintings, artists, magazines, or newspapers? Feel free to touch on one, some, or all of the categories listed, or add a category of your own.

For the third essay, Moises had to respond to one of five questions that are submitted by students from the prior year. Two examples follow of the optional essay questions that Moises faced the year he applied:

Final Essay Option: Superstring theory has revolutionized speculation about the physical world by suggesting that strings play a pivotal role in the universe. Strings, however, always have explained or enriched our lives, from Theseus's escape route from the Labyrinth, to kittens playing with balls of yarn, to the single hair that held the sword above Damocles, to the basic awfulness of string cheese, to the Old Norse tradition that one's life is a thread woven into a tapestry of fate, to the beautiful sounds of the finely tuned string of a violin, to the children's game of cat's cradle, to the concept of stringing someone along. Use the power of string to explain the biggest or the smallest phenomenon.

Final Essay Option: とらわれない心 means "mind that does not stick." Zen Master Shoitsu (1202–80)

It is not surprising that the many middle- and upper-income parents now pay college tutors and writing coaches to help their children write these essays and apply to college. Some programs like College Summit focus specifically on helping students craft their application essays. Moises and Grady didn't get such help; their task was particularly onerous because they were also involved in a rigorous IB program, where they faced many course and program deadlines throughout the fall. While Moises and Grady's efforts were impressive, so too were those of their teachers who had to fill out individual forms for each recommendation they wrote. Moises and Grady had to get a minimum of two recommendations for each school to which they applied.

Gizella, one of the top students in her IB program who had a meticulously detailed and organized college planning process, was surprised to learn that some colleges had very early admissions deadlines:

"I have friends in my class that haven't applied to colleges yet, and we're supposed to be the top students... and we were missing information... I wanted to apply to schools in California, but they only accepted [applications] from November 1 to November 30, I believe... And we weren't aware that you need the ACT with writing [for some colleges]... We weren't as informed as we should have been."

Not completing the writing portion of the ACT—which has only recently become a part of CPS's district-wide ACT administration—prevented Gizella from applying to two selective out-of-state colleges that were of interest to her. Grady also identified standardized testing as a gap in his college information. When he was asked what he would change about college planning at his high school, he said:

"I would change...the tests that they push here. They don't push the [SAT] subject tests at all, and those are really important if you want to go to schools that aren't in the Midwest, like Stanford and Rice...I think this might be a big reason why I

didn't get into Stanford or Rice, because I was really totally unprepared for the subject tests, like I didn't even know I had to take those. . . [school staff] really want people to stay in-state, and I understand that, but you still need to give everybody the opportunity to go where they want to go . . . "

While there may be several reasons why these students are not applying to more selective colleges, the complexity of some of these college applications seems to be a contributing factor for these students. Many of these high-achieving and highly motivated students simply lack information and support necessary to effectively complete complex college applications.

#### Challenge 4

# Handling the Competing Demands of Coursework and College Planning

Overcoming the challenges of college search and application described above would be hard for any student, but the task can become exponentially harder when time is already at a premium. Students in academically advanced programs are clearly at an advantage in the college admissions process; by their very classification, they have had the exposure to the advanced coursework that colleges are looking for, and they are also likely to have earned strong grades and test scores. However, the academic demands of these programs lead to a conundrum during senior year: students need to balance the amount of time dedicated to their rigorous coursework with the time needed to complete their complex college applications, in addition to other family and work responsibilities.

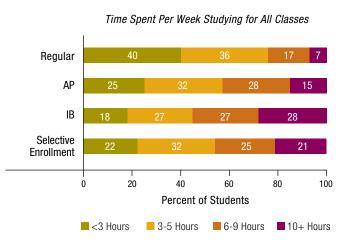
Indeed, academically advanced students have worked hard throughout high school. They are particularly distinguished by how much they study throughout their junior and senior years. Figure 13 presents seniors' self-reports on the CCSR's 2005 senior survey of the amount of time per week students report studying for all of their classes. Unfortunately, the average CPS senior reports spending little time on homework. More than three-quarters of regular track students in CPS report spending fewer than five hours on homework a week, and 40 percent spend less than three hours.

In contrast, more than 40 percent of students in the AP track and in selective enrollment schools report spending six or more hours on homework each week. Students in IB programs are distinguished by the amount of time they study. Among IB students, 28 percent report spending at least ten hours a week on homework, and more than half report spending six or more hours.<sup>29</sup>

For students taking AP courses for the first time in their senior year, the workload was often substantially more intense than it had been in earlier years. In our qualitative study, we found that some students believed that their senior year coursework demanded a completely different level of effort than what they had experienced previously; they reported that they truly had to struggle to keep up. Halle, a very capable student accustomed to getting As in her regular and honors courses, describes the higher expectations she experienced in her senior year AP economics course:

"We got report cards yesterday... I got a D in AP Economics... All the years I've been at [this school], I've never really had to work hard at anything... I could easily read [the material], take some notes, and go get an A on the test. But this class is not like that."

FIGURE 13
Students in academically advanced programs and schools spent more time studying for all their classes



Note: Data are from the graduating class of 2005 and are limited to students who answered the 2005 CCSR Student Survey. These numbers do not include students who were in special education or attended an alternative high school. Schools with AP programs are only included if they had at least 25 students who took at least six honors courses and two AP classes.

Students in the IB program often reported that they were used to studying hard. But, managing senior year coursework became even more complicated because the deadlines for completing their final IB exams and projects competed with college application deadlines. Gizella, one of the top students in her IB program, describes the increased challenge of her IB courses during her senior year:

"... This year it's like they're trying to play catch up, and get everything in. We have our IB deadlines, so everybody's just piling work on this year... No class is so hard that you can't do it. But everybody has to pick sometimes, 'well I gotta do this class instead of this class,' because you just don't have enough time to do all the homework. At least I know I don't."

Gizella points to this particularly important issue of competing demands among IB students. Gizella goes on to explain that she sometimes feels as though IB students are "forced to have to decide whether to do homework or apply to college." She says she also struggles to find time to write essays and complete other application requirements:

"We should have a day to do that...I know personally some of my friends just ditch school just so they can do college applications . . . that's like the nerdiest thing I've ever heard!"

For some students, managing this strenuous workload and applying to college at the same time was a formidable, but manageable, challenge. Gizella, for example, managed to keep her GPA up and apply to nine colleges at the same time. Grady said that managing the IB workload was the biggest challenge he faced in high school, but still completed applications to a lengthy and well-rounded list of colleges. For some students, though, the competing demands of coursework and applications became a more daunting obstacle on the road to college. Sabrina, an ambitious AP student profiled in the "Potholes" report, had a hard time keeping up with her coursework, her work schedule, and her college applications:

"I just keep seeing those essays. I'm like, 'ok, I'm gonna get back to that' . . . I have a heavy course load, and then I have a job, and then when I get home, it's like, 12, 1 in the morning, and I'm not thinking about my college applications. I'm thinking, 'oh, I got to go to school tomorrow, let me do some homework.' And then, do it all over again the next day."

As we noted earlier, Sabrina ended up completing only one college application and did not enroll in college the year after she graduated.

When asked what, if anything, each student would have changed about how his or her high school helped prepare students for college, several IB students focused their answers on how they needed help managing these competing demands—and especially in finding time, space, and structure to complete their college applications. As Jennie (see case study) noted, sometimes coursework won:

"I needed to be pushed more, because with all the homework in the IB program and everything else, I was more focused on that than trying to apply for college. I mean [applying for college] would be on my weekends if I had time. I would have to be pushed more. I mean, we do have the college fair other things that help us, and we have the college counselors. They're there when you need them—you can always go to them, but . . . I just never went."

Marco, also profiled in the "Potholes" report, said:

"[IB students] actually need more support than the rest of the school, because we have barely any time to do anything. We're always doing work after work after work, and then since we have so many things to do, we forget about things. We need somebody that can be reminding us constantly, 'get this done, get this done, find time to do this.'"

The fact that students who experience an academically rigorous senior year struggle to find the time to carefully complete their college applications is an unavoidable truth that is unlikely to change in coming years as more and more students take advanced

coursework and high schools and districts across the country take steps to increase the academic demands of high schools. It does, however, create a workload that grows exponentially for students in academically advanced programs—and it leaves them at risk of sacrificing time needed to complete college applications to spend more time on coursework instead.

#### Challenge 5

# Understanding the Complexity and Importance of Financial Aid

A critical part of examining this pattern of college mismatch is whether college costs, or perceptions of college costs, create barriers for CPS students. There is no doubt that rising college costs and the declining real value of financial aid are important barriers to college enrollment for low-income students. A 2006 U.S. Department of Education report found that the average percentage of family income needed to cover college costs after grant aid has increased substantially. At public colleges in 2003-04, families in the lowest income quartile still had an unmet need of almost half their family income, compared to an unmet need of 10 percent of family income for families in the highest income quartile.<sup>30</sup> The Advisory Committee on Student Financial Assistance (2002) reports that shifts in the policy and priorities throughout levels of government, in combination with rising college tuition, have resulted in financial barriers that prevent 48 percent of college-qualified, low-income high school graduates from attending a four-year college within two years of high school graduation.

Throughout this chapter, we have examined possible explanations for college mismatch among the highly qualified students in academically advanced programs. The role financial aid plays in college match for these students is of paramount importance, especially considering the cost of attending colleges that match their qualifications. Since all but one of the public colleges in Illinois are considered somewhat selective or nonselective, this group of schools provides limited options for academically advanced students seeking to make a college match. These students must, therefore, consider both private and out-of-state colleges; tuition costs at

these schools may seem prohibitive, given the family background of the students who are the focus of this report. However, these students—highly qualified, often racial/ethnic minority and/or first-generation college students—are likely in a good position to receive strong financial aid packages, especially from more selective colleges who have a stated goal to maintain a diverse student body. These students then face two ostensibly conflicting ideas when it comes to the affordability of colleges that match their qualifications. These colleges typically appear to be more expensive than less selective, mismatch schools, but CPS students who apply to them may have greater access to financial aid. This poses important questions for the students in these programs. Can the financial aid these schools offer offset the high tuition? Put another way, what has the hard work these students have exhibited throughout high school really afforded them in the college market? Understanding these dynamics is essential to understanding whether or not highly qualified, lowincome students can truly afford to enroll in colleges that match their qualifications.

These questions of access and equity have received significant attention from many colleges. While federal aid for college has shrunk in proportion to college costs, some of America's top colleges have begun paying close attention to potential applicants with the most need.<sup>31</sup> In 2006, Harvard University announced that any admitted student whose family made less than \$40,000 per year would attend Harvard for free-entirely bypassing Harvard's hefty price tag, which is now in excess of \$50,000 per year for tuition, room, board, and supplies.<sup>32</sup> In 2007, the University of Chicago announced its Odyssey scholarship, a similar no-cost, no-loan strategy to ensure that the most economically disadvantaged students are able to meet its similarly high price of enrollment.<sup>33</sup> These initiatives point to an important, but often overlooked, factor pertaining to college finance: although the overall cost of attending college varies greatly from one institution to the next, so too does the ability of colleges to meet the financial need of their students.

Indeed, depending on a number of factors, the small group of very low-income students in the country who have the qualifications to attend these colleges may actually find that—after financial aid—they and their families will pay less out-of-pocket to attend these colleges than they would to attend a number of public institutions with seemingly much lower tuition. The goal for these students, then, should be to enroll in colleges that are best able to meet their financial need, not to enroll in colleges with the lowest price tag. If this is the goal, then college search is not just about making a college match or finding a college fit. It is also about leveraging academic qualifications, not just to gain admission to top colleges but also to receive the strongest financial aid packages available.

What difference does a strong financial aid package make at a selective college? The hypothetical financial aid packages in Hypothetical Financial Aid Packages illustrate the differences between price tag and net cost by comparing hypothetical financial aid packages for a student with an Expected Family Contribution (EFC) of \$0 at colleges with admissions requirements listed in Tables 5A and 5B. Consider a student applying to these universities. For many families, the tuition of private universities seems prohibitive, but the financial aid policies of these colleges differ so widely that the net family responsibility is quite different than the stated price. These calculations are not exact. They do not account for the fact that low-income and racial/ethnic minority students may have greater access to merit scholarships than other college applicants, and they do not specify the proportion of financial aid that is given to families in the form of loans—although, as we've stated, some colleges such as the University of Chicago have become no-loan institutions for low-income students. What these estimations do illustrate is that students in academically advanced programs have potentially earned significant rewards for their hard work throughout high school—they can get into more selective colleges, which may give them access to more financial aid that will reduce the net costs of college.

The potential payoffs to hard work should be an incentive for academically advanced students to fully participate in preparing financial aid applications and to seek out and apply to colleges that offer competitive financial aid packages. If highly qualified, first-generation college students better understood how the financial aid system works, college costs and financial aid could motivate them to cast a wider net in their

college search than their less-qualified peers. However, more often, college costs and the financial aid process hinder rather than help low-income students. First, a lack of knowledge of potential financial aid packages often leads first-generation, low-income college students to constrain their college search—even before they apply to colleges. Second, a lack of participation in the financial aid process means that many students do not effectively access the financial resources that are available to them.

Confusion and uncertainty about college costs among these students often leads them to constrain, rather than expand, their college search. Under the current financial aid system, students do not know how much they will be asked to pay until after they have applied and been admitted to college.<sup>34</sup> Facing this uncertainty of how much they will have to pay, students and their parents tend to overestimate the real cost of college.<sup>35</sup> In one study in Los Angeles, Mari Luna De La Rosa (2006) found that many students believed that college was too expensive for them to attend and felt that applying for financial aid was too complicated to attempt. These perceptions are often shaped by students' and their families' lack of access to information on how financial aid could significantly mitigate the cost of college. Flint (1993) found that when low-income parents received early awareness of financial aid programs—especially grants—their children conducted wider college searches and that this early exploration of college options made them more likely to consider applying to colleges with higher stated tuition.

In our qualitative study, we similarly found that a lack of financial aid information and confusion about college costs became major impediments to many students and often generated what we term "sticker shock," meaning that students would rule out college options early in their college planning process if they felt the stated tuition was too high. For some students, such as Jennie, it led to making early decisions to attend a two-year college, rather than applying for financial aid and waiting to make a college decision until after financial aid had been awarded. Because their understanding of financial aid was so limited, the potential financial payoffs to hard work were never a motivating factor for these students.

### Hypothetical Financial Aid Packages

Throughout our qualitative fieldwork, we encountered many students who had a very difficult time imagining what the real cost of college would be for them—that is, the cost of college after the school has awarded financial aid. These students assumed they would have to pay the entire cost of tuition at various schools; they did not realize that the stated amount of tuition can be somewhat misleading, especially for CPS students who tend to be very low income and should expect to pay less than the full cost of tuition. This makes them potentially very reliant on financial aid assistance—but also highly eligible for need-based federal, state, and institutional aid. In seeking to answer our own questions about what students in CPS could reasonably expect to receive in financial aid and, therefore, what they should reasonably expect to pay out-of-pocket—we used data from the College Board's website to estimate hypothetical financial aid packages for a high-need student at various colleges.

The College Board collects and reports on a number of indicators around college cost and financial aid. In addition to reports of total cost of tuition and fees, we found one number to be very helpful—that is, the average percent of need that is met by the college. Any proportion of need not met by the college translates into a remaining cost that will need to be paid by the student or her family. Here, we estimate that cost for the two lists of schools we referenced earlier in this section: a list of schools that a student with average qualifications for college might consider attending (see Table B), and a list of schools that a highly qualified student in an academically advanced program might consider attending (see Table C). The estimates in these tables are based on college cost and financial aid information from the 2008-09 school year and are estimated for a student attending full time and living on campus.

Financial aid packages are certainly more complex than what we have presented in these tables—they

bundle aid from many different sources and present resources to students in the form of grants, loans, and work-study programs. Clearly, the amount of student loans a low-income student would be expected to take out in order to finance her education is also an important consideration in financial aid; the College Board reports helpful information about student debt (such as the average proportion of financial aid that colleges give as grants versus loans and work study, and the average student indebtedness upon graduation). It is important to note, though, that many colleges and universities—including Grinnell and the University of Chicago, which are featured on our lists—have begun implementing "no-loan" or "loan cap" policies that seek to replace most or all loan aid in financial aid packages with additional institutional grants for students whose families fall below a certain income threshold.

The estimates in these tables are not meant to be concrete guidelines for what any student should expect to pay at these institutions—they are strictly hypothetical, and they reflect a few assumptions. First, we have calculated these estimates based on an EFC of \$0—that is, based on a student who, after completing a FAFSA, receives a Student Aid Report back from the federal government stating that her Expected Family Contribution is \$0. This is not as low a baseline as it may seem: according to the CPS Department of College and Career Preparation, about half of CPS students who file a FAFSA have an EFC of \$0. These estimations also rely on the assumption that students complete their FAFSA and all relevant financial aid forms in a thorough and timely manner—which, given the confusion students have surrounding financial aid, is a more problematic assumption. Keeping those caveats in mind, these estimations can give a very general sense of how tuition price tags can be lowered for low-income students, to varying degrees, at different colleges and universities.

TABLE B
Hypothetical financial aid packages for a high-need student at colleges to which a student with average qualifications might apply

College	Northeastern Eastern Illinois Illinois University University		Aurora University	University of Illinois at Chicago	Southern Illinois at Carbondale	
Туре	Public Non-Selective	Public Somewhat Selective	Private Somewhat Selective	Public Somewhat Selective	Public Somewhat Selective	
Tuition	\$22,788 <sup>O</sup>	\$18,550	\$28,072	\$24,244	\$20,286	
Average Portion of Need Met	57%	75%	88%	85%	97%	
Student/Family Responsibility	\$9,799	\$4,638	\$3,369	\$3,637	\$625	

TABLE C
Hypothetical financial aid packages for a high-need student at colleges to which a student with high qualifications might apply

College	Loyola University	University of Illinois Urbana-Champaign	Knox College	Grinell College	University of Chicago
Туре	Private Selective	Public Very Selective	Private Selective	Private Very Selective	Private Very Selective
Tuition	\$43,223	\$25,184	\$39,583	\$45,750	\$52,298
Average Portion of Need Met	78%	71%	95%	100%	100%
Student/Family Responsibility	\$9,509	\$7,303	\$1,979	\$0	\$0

**Note:** These estimates are derived from cost and financial aid figures reported on the College Board website and reflect data from the 2008-2009 school year.

Second, as we discussed earlier in this chapter, low-income students may suffer the most when it comes to leveraging the financial resources necessary to afford college because they do not participate effectively in filing FAFSAs and applying for institutional aid.<sup>36</sup> Applying for financial aid is not easy, but it may be the most critical step for low-income students on the road to college. It is also one of the most confusing steps, and failing to effectively participate in applying for financial aid may lead low-income students to face higher net costs for college because they do not maximize federal, state, and institutional support.

The American Council on Education (ACE) estimates that one in five low-income students who are enrolled in college and would likely be eligible for a Pell grant never filed a FAFSA.<sup>37</sup> In addition, this report finds that many students apply late (after April 1, the date highlighted as pivotal in the ACE report), as compared to middle- and upper-income students. Since state agencies and colleges themselves often award their aid on a first-come, first-served basis, filing a FAFSA late makes it less likely that students will receive federal, state, and institutional aid. Among college-goers who filed a FAFSA before April 1, 34 percent received state aid—compared to 20 percent of those who filed in June or later. Similarly, 41 percent of pre-April financial aid applicants received institutional aid, compared to only 27 percent of students who filed in April or May and only 18 percent of those who filed later.

We observed all of these problems in our qualitative study. Students were not able to explain how to file a FAFSA or make sure that their FAFSA was complete. They thought that they had actually filed the FAFSA when they had only received the PIN that is required for doing the electronic filing. They claimed that they had filed their FAFSA online, but months later they said that they had "never heard back" about their results. They did not understand the difference between institutional aid offers and their complete financial aid award, mistaking scholarship offers from the colleges they wanted to attend for the more comprehensive financial aid award letters they should eventually have received. Many students in our qualitative study were not aware of financial aid deadlines or the value of filing early. Most students failed to file a FAFSA before the pivotal April 1 benchmark; there was much confusion about the time line for applying for financial aid compared to the time line for submitting the college application. In actuality, prospective students apply for financial aid at approximately the same time that they apply for admission; this system works for offices of college admissions and departments of financial aid, but the deadlines might be counterintuitive to a first-generation college student. Many of the students we interviewed thought that the process of applying for financial aid happened well after the process of applying for admission. As a result, many students applied for aid after the priority financial aid deadlines at the colleges they wanted to attend, and many applied for aid at only one college.

CPS has made FAFSA completion a priority for all students who want to attend college, keeping records of all students who have successfully submitted a FAFSA. Across the graduating class of 2008, 48 percent of students had submitted a FAFSA by April 11. Though this is substantially higher than in years past, it is not nearly as high as the proportion of graduates who planned to attend college in the fall. However, an additional 20 percent of graduates file a FAFSA by the end of June and another 10 percent file by October. For academically advanced students, filing for aid early is even more important because colleges that match their qualifications are likely to have earlier financial aid deadlines. Students in academically advanced programs are outpacing their peers with regard to FAFSA filing; but many students file later in the spring, suggesting that they might not be maximizing their financial aid offers. Of students in selective enrollment schools, for example, 68 percent had filed a FAFSA by April 11 and an additional 20 percent had filed a FAFSA by October. What is more alarming, however, is the very small proportion of academically advanced students only about one-third overall—who had filed a FAFSA by February 15. Though this may appear to be an unreasonably early benchmark, it is in actually in line with financial aid deadlines at many selective and very selective colleges.<sup>38</sup>

In summary, academically advanced students have a potential advantage over their less-qualified classmates in handling the daunting costs of a college education.

They have access to a wide range of colleges and, in turn, have more access to the merit and institutional aid that makes college more affordable. Thus, CPS should realize that providing adequate information to students and their families about the financial aid system could transform college costs from being a barrier to an incentive in college search and selection. A better understanding of the financial aid system could motivate students to expand their searches to include colleges that provide generous financial aid packages.

#### The Result

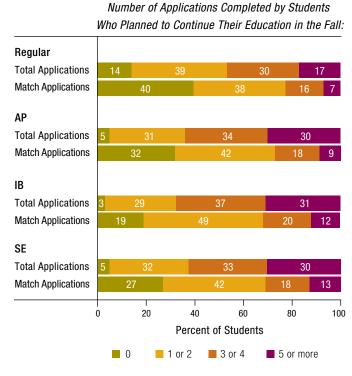
# Defaulting and Mismatch in College Applications and Enrollment

This section has focused on finding answers to the question: why is it that students who have worked so hard in high school to earn strong qualifications for college would enroll in less selective colleges? First, as outlined in the "Potholes" report, even highly qualified, first-generation college students struggle with completing the basic steps toward four-year college enrollment and often do not know their college options. In addition, highly qualified students face special barriers applying to and enrolling in the more selective colleges they are qualified to attend. As we have discussed in this chapter, these students also need to do more work on their college applications because applying to more selective colleges means managing accelerated time schedules and completing more labor-intensive applications for colleges that are increasingly competitive—making it even more imperative that students apply to more than one match college. In addition, these students already face much greater work demands during their senior year, which forces tradeoffs between their school work and their college applications. Finally, these students need to think strategically about finding colleges that not only meet their academic and social needs but that also minimize the short-term and long-term financial burden for them and their families. Although these two qualities are frequently found in the same colleges, students often do not know this. Considering these ideas to be tradeoffs could be one reason that research has consistently found that low-income students are less likely to apply to more selective colleges than their more advantaged peers.

The end result of these distinctive challenges is that many academically advanced students end up defaulting to the same colleges as other CPS students. While students in academically advanced programs apply to more colleges than the average student, they are not applying to schools that would match their qualifications. Figure 14 uses data from the SEQ to compare the number of colleges students applied to versus the number of match colleges students report applying to. Overall, academically advanced students such as Clara are more likely to apply to multiple colleges than are other students. Most apply to a minimum of three colleges, and nearly one-third apply to five or more colleges. These students do not, however, apply to this number of match colleges. More than two-thirds of students in academically advanced programs apply to two or fewer match colleges, and more than onequarter of AP and selective enrollment students do not apply to a single match college.

FIGURE 14

AP and IB students complete more college applications, but not necessarily to schools that match their qualifications



**Note:** These numbers are from graduating classes of 2005 and 2006 and do not include students who were in special education or attended an alternative high school. Schools with AP programs are only included if they had at least 25 students who took at least six honors courses and two AP classes. In this figure, applications to "Special" or "Unrated" four-year colleges were grouped with applications to "Nonselective" four-year colleges.

Another way to consider the extent to which students in academically advanced programs are engaging in a constrained college search process is to examine the role of feeder patterns in college enrollment for these students. As can be seen in Figure 15, among students in academically advanced programs, there is a similar pattern of college enrollment as has been documented for the system as a whole. Of the students who enroll in a four-year college, more than 40 percent of graduates of academically advanced programs enroll in the same six most popular colleges for CPS graduates. This is only slightly lower than the 47 percent of regular track students who do so. To be clear, academically advanced students are more likely to attend the more selective colleges among the "Top 6," and the average CPS student is more likely to attend one of the less selective colleges. Still, the picture that emerges from these data is not one of breaking old feeder patterns and forging new ones, but rather of reshuffling students into old feeder patterns.

A comparison to Lincoln Park's IB program is helpful here. Only 26 percent of Lincoln Park IB graduates enroll in one of the six most common four-year colleges, indicating that this program has indeed broken away from the system-wide patterns (see page 14 for more information on Lincoln Park's IB students).

Even more telling are the college enrollment patterns for students who break feeder patterns. As seen in Table 6, among IB students at Lincoln Park who choose a four-year college beyond the six most common institutions, 59 percent enrolled in a very selective college. This is not the case for other IB students, AP students, and students in selective enrollment schools: fewer than one-quarter of IB, AP, and selective enrollment students who attend a four-year college beyond the "Top 6" enroll in a very selective college, and at least one-third attend a somewhat selective or nonselective college. The bottom line of limited applications to match colleges and defaulting to usual colleges attended by CPS graduates is that the majority of graduates of academically advanced programs ultimately enroll in colleges with selectivity levels below the kinds of colleges to which they would have access. As seen in Figure 16, less than half of students from these academically advanced programs end up enrolling in colleges that match their qualifications. More than 30 percent, like Clara, enroll in colleges far below their qualifications.

We have explored the barriers that even students in academically advanced programs face in enrolling in match colleges. Some of these barriers are similar to those of their classmates. Others arise because of the nature of the college search and application process for these students if they are to enroll in the types of colleges to which their qualifications give them access. Throughout this report, we have stressed the importance of college choice and enrolling in a match college. The logical next question is: why do we claim that college choice is important when these students seem likely to succeed no matter where they enroll?

### Why is College Choice Important?

A central premise of much of this report is that making hard work pay off means supporting students in getting access to colleges that offer them academic challenge, as well as social and academic environments that will build on their high school experiences. Throughout this report, we have consistently highlighted the problem of college mismatch among highly qualified students and the overall CPS population. It is worthwhile to consider the question: why is college match important? The first reason is basic: we cannot ask students to set high expectations for themselves, work hard in high school, and take rigorous courses if they could have actually worked less hard in high school and gained admission at the colleges they ultimately attend. This pattern of mismatch sends precisely the wrong message to students.

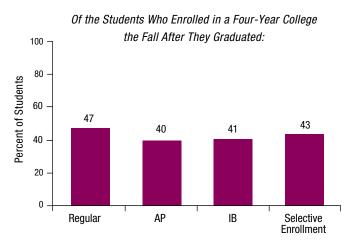
The goal of getting more highly qualified, low-income, minority students to attend top colleges, however, is not without controversy. Particularly in a time when colleges are paying attention to attracting a diverse student body, there is a concern that colleges may accept higher-achieving, low-income students who do not have the skills needed to succeed in top colleges. It has been argued by groups such as the Cato Institute that these students may be better served by attending less selective colleges where the demands are not as high, and that this upward mismatch is harming these students by making it more likely that they will

drop out of college.<sup>39</sup> This contention, however, is not supported by evidence.

Research has shown that enrolling in a match college matters a great deal in students' likelihood of attaining a degree, particularly for low-income, first-generation college students. Alon and Tienda (2005) found that students of all racial/ethnic backgrounds were more likely to obtain a bachelor's degree if they

FIGURE 15

About 40 percent of academically advanced students enroll in one of the Top 6 popular four-year colleges for CPS graduates



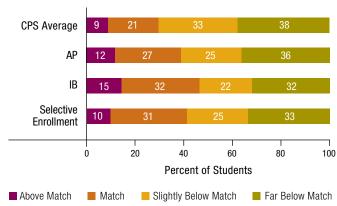
■ Enrolled in one of the top six popular four-year colleges (based on college enrollment patterns of 2005-2006 CPS graduates): UIC, University of Illinois at Urbana-Champaign, Northeastern IL, Northern IL, Chicago State, and Southern IL

**Note:** Data are from graduating classes of 2005 and 2006 and do not include students who were in special education or attended an alternative high school. College enrollment rates were adjusted for CPS graduates who may have attended a college not participating in NSC's enrollment verification program. Schools with AP programs are only included if they had at least 25 students who took at least six honors courses and two AP classes.

attended more selective institutions, even if they were "overmatched," compared to their similarly qualified counterparts who attended less selective institutions. Light and Strayer (2000) found that highly qualified students were significantly more likely to graduate from colleges that matched their qualifications, as compared to colleges of lower selectivity. In fact, research by the Illinois Education Research Council showed that

FIGURE 16

Fewer than half of students in academically advanced programs enroll in colleges that match their qualifications



Note: These numbers are from graduating classes of 2005 and 2006 and do not include students who were in special education or attended an alternative high school. Schools with AP programs are only included if they had at least 25 students who took at least six honors courses and two AP classes. College enrollment rates were adjusted for CPS graduates who may have attended a college not participating in NSC's enrollment verification program. In this figure, students who enrolled in "Special" and "Unrated" four-year colleges were grouped with those who enrolled in "Nonselective" four-year colleges. Students who are labeled as "Above Match" enroll in schools with selectivity ratings that exceed what they have access to attend. Students labeled as "Match" enroll in schools with ratings that match what the students attend. Students labeled as "Glightly Below Match" attend schools that are one selectivity category below the students access level. In the case of students with only access to a two-year school, those who do not enroll in any college are considered "Slightly Below Match." Students labeled as "Far Below Match" attend schools that are two or more selectivity levels below what they have access to attend, in some cases these students do not attend college at all. See Appendix H for a table that describes the match patterns for all students in academically advanced programs in more detail.

TABLE 6

Of the students going to a four-year college but not attending a "Top 6" college,
Lincoln Park IB students were much more likely to attend a selective or very selective college

Four-Year College Enrollment	Regular	АР	IB	Lincoln Park IB	Selective Enrollment
Very Selective	3%	15%	22%	59%	23%
Selective	18%	48%	45%	34%	39%
Somewhat Selective	38%	26%	22%	4%	24%
Nonselective or Special/Unrated	41%	10%	11%	4%	13%

**Note:** Data are from graduating classes of 2005 and 2006 and do not include students who were in special education or attended an alternative high school. College enrollment rates were adjusted for CPS graduates who may have attended a college not participating in NSC's enrollment verification program. Schools with AP programs are only included if

they had at least 25 students who took at least six honors courses and two AP classes. In this table, students who enrolled in "Special" and "Unrated" four-year colleges were grouped with those who enrolled in "Nonselective" four-year colleges.

students in Illinois are more likely to graduate from colleges with higher levels of selectivity, even when they have qualifications that are lower than those of their classmates.<sup>40</sup>

These impacts on graduation rates are substantial for high-achieving students, like Jennie, who instead begin at a two-year college. Sara Goldrick-Rab, at the University of Wisconsin at Madison, recently used Chicago data to examine the impact of college choice on bachelor's degree completion. This analysis included substantial controls for student background and used propensity score matching to address selection effects. Goldrick-Rab found that there was a strong negative effect of attending a two-year college for students who otherwise had a strong likelihood of attending a selective four-year college. Among this group, the odds of finishing a bachelor's degree were 77 percent to 87 percent lower if they had made the choice of attending a two-year college over a four-year selective college.41

These and other studies find that the selectivity of a college is associated with graduation rates. Students who attend a college that meets or even exceeds their qualifications have significantly higher probabilities of graduating. They also may obtain higher payoffs for their college education. Hoxby (1998) finds that although students may pay more to attend more selective institutions, they also earn more money in the long run; ultimately, they earn back the money they paid or borrowed to attend a more selective college. Thus, if the goal of going to college is to attain a four-year degree or to achieve a financially stable career, selectivity should be considered an important factor—though certainly not the only factor—in college choice. Even colleges of similar selectivity foster vastly different environments and supports for students. For example, a recent Pell Institute report looked at what institutional characteristics might explain the wide variation in graduation rates among colleges that serve high proportions of low-income students. This report concluded that, even among colleges of similar selectivity, certain institutional characteristics—small class size, intentional academic planning, and an explicit retention policy-may improve the graduation rates for low-income students. 42 The goal then is not simply to get students to apply to "match" colleges but rather to arm students with the information they need to identify what matters most and to find colleges that offer the highest quality education and will best advance their academic and social development.

# Interpretive Summary

This report identifies a set of accomplishments that would have been difficult to envision 20 years ago when Secretary of Education William Bennett proclaimed Chicago schools the "worst in the nation." In 2006, there were seven selective enrollment high schools and 19 neighborhood high schools that offered CPS students the opportunity to participate in an IB or AP program. The college qualifications of the graduates of these programs are impressive. About 90 percent of graduates of academically advanced programs have access to attend at least a somewhat selective college. Students in AP and IB programs have accomplished an even more remarkable feat: more than 40 percent of these students are eligible to attend a very selective college. What makes these accomplishments particularly noteworthy is that so many students in these programs are first-generation college students, often from neighborhoods with high rates of poverty and low levels of education.

In addition, after accounting for their elementary school achievement and other background characteristics, graduates of IB and AP programs obtain equivalent ACT scores and higher GPAs than their counterparts in selective enrollment high schools. Thus, IB programs and AP coursework in neighborhood high schools appear to be effectively filling in a gap for promising students with high test scores who might not have been able to gain admission or who did not apply to selective enrollment schools. However, there is still opportunity for improvement. Rather than resting on their accomplishments, these schools should aim to ensure that students who earn such strong qualifications for college enroll in colleges that demand them.

The success of graduates of AP and IB programs in CPS is especially important for the future, as the numbers of high-achieving eighth-graders continue to grow. New selective enrollment schools have tended to be small, with only about 200 graduates per year, and this relatively small number of

The success of graduates of AP and IB programs is especially important for the future of CPS. new slots has not kept pace with demand. Among students who entered high school in 2007, half of those who scored at the seventh stanine or above—as well as the vast majority of students scoring at the sixth stanine—were not enrolled in a selective enrollment high school. It is somewhat surprising, then, that these academically advanced programs operate in a limited number of schools and have reached only a small proportion of CPS graduates. These programs are small for different reasons. IB programs, with the exception of Lincoln Park, were intended to provide highly rigorous coursework to a small number of top students in a handful of neighborhood high schools who were willing to do the hard work it takes to succeed.

By comparison, AP coursework has expanded dramatically in CPS in recent years, with 34 percent of graduates in 2006 having taken at least one AP course. The distinction here is that AP operates as a course, rather than a program, and that few students are engaged in a rigorous sequence of honors and AP coursework throughout high school. In 2006, only ten neighborhood high schools had a sufficient concentration of graduates who had taken this sequence (at least 25 graduates per year) to be considered under our definition as a program. Overall, only 7 percent of graduates of neighborhood high schools completed an AP or IB program.

### The Challenge

As is so often the case in education, as soon as educators climb one peak they look ahead to find yet another mountain. The success of academically advanced programs presents special challenges for all schools and programs, but especially for neighborhood high schools with IB programs and selective enrollment schools serving more disadvantaged populations. Specifically, those college qualifications are not translating into matching college enrollment. Across all groups, there remain substantial gaps between students' college access and eventual college enrollment. Among AP students, for example, though 63 percent have access to attend a selective or very selective college, only 39 percent enroll in such a school. In addition, students in academically advanced programs seem to be

reshuffling themselves into old feeder patterns, rather than forging new patterns of college attendance, as is the case with Lincoln Park's IB program. Among students enrolled at a four-year college, more than 40 percent of academically advanced students enroll in the same six colleges that are the most popular choices for students across CPS.

A central finding in this report is that while students in IB programs are higher-achieving than the rest of the students in their school, they have strikingly similar demographic and socioeconomic characteristics: they are largely first-generation college students, predominantly minority, and often come from neighborhoods with high levels of poverty and limited access to adults with higher levels of education. This is also true of many students in selective enrollment high schools and neighborhood high schools with AP tracks. By nature of having strong qualifications but coming from relatively disadvantaged backgrounds, students in these academically advanced programs have two groups of peers, local and national, with whom they have critical similarities and differences that will shape their participation in the college planning process.

One peer group is in their neighborhoods and schools and consists of students who come from similar environments and family backgrounds. These students will face the same challenges as their peers as they navigate the college search, application, and choice processes and will require strong support from their schools. Yet, in comparison to most of their neighborhood and school peers, they have one critical advantage: no matter where they come from, IB, AP, and selective enrollment students do not struggle with low academic qualifications for college.

Academically advanced students also have a national set of peers—peers with whom they share strong college qualifications. It is this peer group that is their competition in gaining admission to more selective colleges. This second group of peers is often more advantaged—they are more likely to come from families and schools that provide access to detailed knowledge of, and structured support for, the college planning process; and they are likely to have greater financial resources. Since our data is limited to CPS students, it is hard to compare academically advanced CPS students to this

national peer group; however, Lincoln Park's IB students might be the most fair comparison, given their demographic and achievement characteristics. Among this second group of peers, CPS students face crucial disadvantages. Getting into top colleges has become increasingly competitive, and CPS graduates are being compared to a group of students who are typically able to draw on a much deeper pool of resources and support in the college planning process.

Too often, students in academically advanced programs show college enrollment outcomes that mirror those of their less-qualified classmates rather than those of their highly qualified national peers. How could this be? The first set of reasons was outlined in the "Potholes" report; having high qualifications does not alter the reality that these students often come from families and neighborhoods that are less able to provide concrete support and knowledge about the college admissions process. These students, like their neighborhood peers, struggle in taking the steps necessary to apply to and enroll in four-year colleges. In fact, one-fifth of students in academically advanced programs do not even apply to a four-year college.

There are also a number of barriers academically advanced students face related to the problem of match. First, though these students are in a position to conduct wider college searches that include more selective colleges, many do not understand the broad range of colleges to which their qualifications afford them access. Second, when they do consider more competitive colleges, they often lack the structured support necessary to navigate the more complicated and specialized application process. Third, these students face competing demands from their challenging coursework. Finally, far too often, lack of knowledge of financial aid possibilities and lack of effective participation in financial aid prevent them from getting the aid they deserve. As a result, academically advanced students often fail to reach out to more selective schools. About 30 percent of AP and selective enrollment students and 19 percent of IB students do not apply to even one match college, and fewer than half enroll in one.

These students, their teachers, and their parents have done the hard work that is required to develop strong college qualifications, but how do we make their efforts pay off? These students have access to more selective colleges, which will likely earn them more comprehensive financial aid packages, a greater probability of graduating, and higher earnings in the long run. However, students need one final set of skills—what some have termed "college knowledge"—to make this hard work pay off. For these students and their families, successfully participating in college search, application, and choice requires technical knowledge and expertise. Building a sophisticated knowledge base in first-generation college students requires that high schools do more than simply set expectations that students go to college: they must also fill the gaps in students'—and their parents'—understanding of college search, application, and selection. Barbara Schneider (2006) has eloquently described the nature of this challenge, particularly for top students:

"Parents are an important asset in the college process, primarily by reinforcing the message to their children about the value of attending college. While educational expectations are imperative, matching students' abilities and interests with a college program is becoming increasingly complex and requires a sophisticated knowledge base. This is a knowledge base that many parents, especially those who never attended college, do not have. They may believe that all colleges are similar and that it does not matter where one attends, even if their student has special talents or skills. This message is passed on to their children, who then articulate similar beliefs. In these instances, the school becomes a critical player in the college-going process."

In our "Potholes" report, we built on this idea and discussed the importance of high schools having a strong college-going culture. We used teacher survey responses to define college-going culture as the extent to which teachers believed that students in their school should go to college; that their school's curriculum aims to prepare students for college; and that teachers in their school helped students plan for college. Teacher reports of a strong college-going culture was the most consistent predictor of whether students would complete each step in the college enrollment process, and it was a particularly strong predictor of whether they would enroll in a match college.

In this report, we raise new challenges that practitioners will have to meet in order to build college-going cultures that meet the specific needs of academically advanced students. For these students, high schools have to provide support for students in identifying colleges of interest and making an appropriate final list of colleges; work with students and families to help them understand the financial aid process and assess what the possible cost of different colleges might be, after financial aid; structure and monitor the accelerated application timeline for high-achieving students; supply technical expertise in the college application process; and guide students in weighing the pros and cons of their final college options and then making a good college choice. For these students, our benchmark should not be whether or not they attend any four-year college. If we truly want their hard work to pay off, our benchmark should be whether students and their families have made a fully informed college choice, that is, one based on full knowledge of the wide range of college options available and the potential benefits of those different options, as well as effective participation in the financial aid and college application processes. Indeed, since many students in academically advanced programs do not have access to college knowledge similar to their national peer group, they are not competing on an even playing field. If high schools seek to level that playing field, they must provide equal access to college knowledge. This means that schools need to build new models for providing support to guide their students through the college planning process.

We focus here on the most-qualified students. Though it may appear—given their strong college qualifications—that these students need very little attention, we focus on them for two reasons. First, as we hope we have made clear in this report, academically advanced students face special opportunities and risks in college planning, which call for specialized supports. While helping these students achieve their college aspirations seems like an easy task, we do not want to underestimate the challenge this additional support poses to high schools. Second, the academically advanced programs that are the subject of this report should be models of practice in CPS and provide illuminating examples of what high-achieving students

across the system can aspire to accomplish. As the educators running these programs look ahead to the next mountain, they can also look behind them to find another group of educators and students just beginning the ascent. We have witnessed a dramatic expansion of AP enrollment in CPS, and many high schools are trying to build the curriculum and supports that will provide even greater options for students. Indeed, we hope that a higher and higher proportion of CPS graduates will have qualifications as strong as these students do, and building effective models of college support for these students will be an increasingly important task for the school system.

Meeting the challenge of building these models should not be seen as the exclusive responsibility of high schools. Colleges also have an important role to play in helping these students attain their educational aspirations. In our "Potholes" report, we raised the question: what responsibility does higher education have to "reach back" into high schools and bridge the information and access gap that low-income and firstgeneration college-goers face? There is a huge potential benefit to colleges in supporting and recruiting these qualified students and making sure these students fully understand their college options. These are the students who have a higher likelihood of succeeding in college and can build the diversity in which colleges espouse a belief. Overcoming the barriers these students face will require that colleges make significant investments in targeting, recruiting, and supporting low-income and first-generation students, as well as addressing rising college costs and enhancing financial aid packages. It will also require partnering with high school districts and building new support systems for the postsecondary transition. These additional demands on higher education raise a serious policy question: what incentives or disincentives exist currently for institutions of higher education to make these considerable investments in building a diverse student body?

When CPS had only three selective enrollment schools, only a small number of people really needed to have the expertise it takes to help top students enroll in top colleges. These students were previously an easily targeted and geographically isolated group, and the schools and practitioners who served them often developed feeder systems with colleges. Now, CPS has more selective enrollment schools and a growing number of neighborhood high schools that produce high-achieving graduates, all of which need to develop college-going cultures and build college expertise if their students are to compete in the increasingly complex and competitive college admission process. If CPS wants the hard work of these students, their families, and their teachers to pay off with college degrees, the capacity to guide these students to top colleges must be spread throughout the city.

This growing group of students has the motivation and capability to attain their educational aspirations of going to good colleges, which is often thought to be the key to a good life. In our qualitative study, we asked students to tell us why they wanted to go to college and why they worked so hard for good grades. Armando, an IB student, responded:

"[I want] a good life, and I also want a good life for my parents, 'cause they work for me and they work hard, they both work in factories . . . I want to get a good job, have a good life and if I don't get good grades, I can't get into a good college. If I don't get into college then I can't get a career. No career, no good paying job, no white picket fence."

The ability of Armando and his peers throughout academically advanced programs in CPS to capitalize on these long-term aspirations depends on more than the strong academic resumés these students have achieved throughout their high school careers. It also depends in part on the ability of the adults in their schools to guide them and the willingness of higher education institutions to seek them out.

# References

#### ACT, Inc. (2005)

2005 ACT National Score Report—Data Tables, Table 2: Average ACT Composite Scores by Ability Level for Racial/Ethnic Groups. Available online at: www.act.org/news/data/05/pdf/t1-2.pdf.

#### ACT, Inc. (2006a)

2006 ACT National Data Tables. Available online at: www.act.org/news/data/06/data.html.

#### ACT, Inc. (2006b)

Average ACT Scores by State: 2006 ACT-Tested Graduates. Available online at: www.act.org/news/data/06/states.html.

### Advisory Committee on Student Financial Assistance (2002)

Empty Promises: The Myth of College Access in America. Washington DC: author. Available online at: ed.gov/about/bdscomm/list/acsfa/emptypromises.pdf.

#### Advisory Committee on Student Financial Assistance (2006)

Mortgaging Our Future: How Financial Barriers to College Undercut America's Global Competitiveness. Washington DC: author. Available online at: ed.gov/about/bdscomm/list/acsfa/mof.pdf.

#### Allensworth, Elaine M., and Todd Rosenkranz (2000)

Access to Magnet Schools in Chicago. Chicago: Consortium on Chicago School Research at the University of Chicago.

#### Alon, Sigal, and Marta Tienda (2005)

Assessing the 'Mismatch' Hypothesis: Differences in College Graduation Rates by Institutional Selectivity. *Sociology of Education*. 78(4): 294–315.

#### American Council on Education (2004)

Missed Opportunities: Students Who Do Not Apply for Financial Aid. Washington DC: author.

#### Arenson, Karen W. (2004)

Harvard Says Poor Parents Won't Have to Pay. *New York Times*, February 29, 2004, section 1: National Desk.

#### Avery, Christopher, and Thomas K. Kane (2004)

Student Perceptions of College Opportunities: The Boston COACH Program. In Caroline Hoxby (ed.), *College Choices: The Economics of Where to Go, When to Go, and How to Pay for It*, 355–394. Chicago: University of Chicago Press.

# Avery, Christopher, Caroline Hoxby, Clement Jackson, Kaitlin Burek, Glenn Poppe, and Mridula Raman (2006)

Cost Should Be No Barrier: An Evaluation of the First Year of Harvard's Financial Aid Initiative. NBER Working Paper, 12029. Cambridge, MA: National Bureau of Economic Research.

#### Barron's Educational Series, Inc. (2005)

Profiles of American Colleges (26th edition). Hauppauge, NY: author.

#### Brandon, Emily (2006)

Better Yet, No Tuition. *U.S. News and World Report*. September 18, 2006.

#### Cabrera, Alberto F., and Steven M. LaNasa (2001)

On the Path to College: Three Critical Tasks Facing America's Disadvantaged. *Research in Higher Education*. 42(2): 114–49.

#### De La Rosa, Mari Luna (2006)

Is Opportunity Knocking? Low-income Students' Perceptions of College and Financial Aid. *American Behavioral Scientist*. 49(12): 1670–86.

#### Dell'Angela, Tracy (2007)

More Vying for Chicago's Top Schools. *Chicago Tribune*, January 17, 2007.

### Dynarski, Susan M., and Judith E. Scott-Clayton (2008)

Complexity and Targeting in Federal Student Aid: A Quantitative Analysis. *Tax Policy and the Economy.* 22: 109-150.

#### Flint, Thomas A. (1993)

Early Awareness of College Financial Aid: Does it Expand Choice? *Review of Higher Education*. 16(3): 309–27.

Golrick-Rab, Sara, Fabian T. Pfeffer, and Jennie Brand (forthcoming) Heterogeneity and the Interpretation of Community College Effects.

# Gong, Yuqin, Jennifer B. Presley, and Bradford R. White (2006) Following the Illinois High School Class of 2002: Three Years into College. IERC 2006-5. Edwardsville, IL: Illinois Education Research Council.

#### Grodsky, Eric, and Melanie T. Jones (2007)

Real and Imagined Barriers to College Entry: Perceptions of Cost. *Social Science Research*. 36(2): 745.

#### Gryphon, Marie (2005)

The Affirmative Action Myth. *Policy Analysis* (No. 540). Washington DC: The Cato Institute. Available online at: www.cato.org/pub\_display.php?pub\_id=3722 (accessed January 6, 2009).

#### Horn, Laura, Xianglei Chen, and Chris Chapman (2003)

Getting Ready to Pay for College: What Students and Their Parents Know About the Cost of College Tuition and What They Are Doing to Find Out. Report 2003-030. Washington DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics.

#### Hoxby, Caroline (1998)

The Return to Attending a More Selective College: 1960 to the Present. Unpublished manuscript, Department of Economics, Harvard University.

#### Jackson, Clement (2007)

A Little Now for a Lot Later: A Look at a Texas Advanced Placement Program. IRL Collection Working Paper 69, Cornell University. Available online at: digitalcommons.ilr. cornell.edu/workingpapers/69.

#### Kane, Thomas J. (1999)

Student Aid after Tax Reform: Risks and Opportunities. In Jacqueline King (ed.), *Financing a College Education: How It Works, How It's Changing.* Phoenix, AZ: American Council on Education, Oryx Press.

#### Kao, Grace, and Marta Tienda (1998)

Educational Aspirations of Minority Youth. *American Journal of Education*. 106(3): 349–84.

#### Kaplan, Inc., and Newsweek, Inc. (2006)

America's Hottest Colleges. New York: Newsweek, Inc.

#### Kelleher, Maureen (2001)

Using AP, IB, to Change Schools. Catalyst Chicago, May, 2001.

#### Kirst, Michael W., and Andrea Venezia, eds. (2004)

From High School to College: Improving Opportunities for Success in Postsecondary Education. San Francisco: Jossey-Bass.

#### Koffman, Dawn, and Marta Tienda (2008)

Missing in Application: Top 10% Students Absent from UT's Application Pools. Paper presented at the 2008 meeting of AERA, New York.

#### Light, Audrey, and Wayne Strayer (2000)

Determinants of College Completion. *Journal of Human Resources.* 35(2): 299–332.

#### Martinez, Michael (1999)

City Schools Reshape Magnet Plans. *Chicago Tribune*, July 29, 1999.

#### McDonough, Patricia M. (1997)

Choosing Colleges: How Social Class and Schools Structure Opportunity. Albany: State University of New York Press.

# Muraskin, Lana, and John Lee, with Abigail Wilner and Watson Scott Swail (2004)

Raising the Graduation Rates of Low-Income College Students. Washington DC: The Pell Institute for the Study of Opportunity in Higher Education.

#### National Research Council. (2002)

Learning and Understanding: Improving Advanced Study of Mathematics and Science in the U.S. High Schools. Jerry P. Gollub, Meryl W. Berthanthal, Jay B. Labov, and Philip C. Curtis (eds.). Washington DC: National Academies Press.

#### Newbart, David (2007)

\$100 Million Loan-killer. Chicago Sun-Times, May 31, 2007.

Newsweek, Inc., and Stanley H. Kaplan Educational Center (2007) *How to Get into College.* New York: Newsweek, Inc.

#### Newsweek, Inc. (2008)

The Top of the Class: The Complete List of the 1,300 Top U.S. High Schools. Available online at: newsweek.com/id/39380.

#### Pallais, Amanda, and Sarah E. Turner (2006)

Opportunities for Low-Income Students at Top Colleges and Universities: Policy Initiatives and the Distribution of Students. *National Tax Journal*. 59(2): 357–86.

#### Plank, Stephen B., and Will J. Jordan (2001)

Effects of Information, Guidance, and Actions on Postsecondary Destinations: A Study of Talent Loss. *American Educational Research Journal*. 38(4): 947–79.

#### Planty, Michael, Robert Bozick, and Steven J. Ingels (2006)

Academic Pathways, Preparation and Performance: A Descriptive Overview of the Transcripts from the High School Graduating Class of 2003–04. Washington DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics. Available online at: purl.access.gpo.gov/GPO/LPS76708.

#### Rigol, Gretchen W. (2003)

Admissions Decision-Making Models: How U.S. Institutions of Higher Education Select Undergraduate Students. New York: The College Board.

#### Rimer, Sara (2007)

Making a Hard Life Story Shine and Opening a Door to College. *New York Times*, July 27, 2007.

# Roderick, Melissa, Jenny Nagaoka, Vanessa, Coca, and Eliza Moeller (2008).

From High School to the Future: Potholes on the Road to College. Chicago: Consortium on Chicago School Research at the University of Chicago

#### Roderick, Melissa, and Ginger Stoker (Forthcoming)

Bring Rigor to the Study of Rigor: Evaluating the Efficacy of Advanced Placement as a Strategy for Increasing College Preparation in Urban Schools. In Judith Meece and Jacquelynne Eccles (eds.) Schooling Effects on Children: Theory, Methods, and Applications.

#### Rossi, Rosalind (2000)

The Pull of Magnet Schools. *Chicago Sun-Times*, March 14, 2000.

#### Rossi, Rosalind (2001)

Selective Schools Deny High Achievers. *Chicago Sun-Times*, April 2, 2001.

#### Schneider, Barbara (2006)

Forming a College-Going Community in U.S. Public High Schools. East Lansing, MI: Michigan State University.

#### U.S. Department of Education (2006)

A Test of Leadership: Charting the Future of U.S. Higher Education. Washington DC: author.

#### U.S. News and World Report (2006)

America's Best Colleges. Washington DC: author.

#### U.S. News and World Report (2007a)

America's Best Colleges. Washington DC: author.

#### U.S. News and World Report (2007b)

Gold Medal Schools. Washington DC: author. Available online at: www.usnews.com/articles/education/high-schools/2007/11/29/gold-medal-schools.html.

### Appendix A:

### Data Used in This Report

This report drew on four main sources of data: (1) CCSR data archive from 2003 to 2006; (2) student responses to the 2001, 2003, or 2005 CCSR student surveys; (3) student responses to 2005 and 2006 CPS Senior Exit Questionnaires (SEQ); and (4) a qualitative longitudinal study that has been following 105 Chicago students in three schools from eleventh grade (spring 2005) to two years after graduation from high school (winter 2007).

#### (a) Quantitative Data

To determine students' participation in a college preparatory program or school and students' academic credentials, our dataset included high school transcript and ACT score data for 2003 to 2006 graduates from CCSR's data archive. We also excluded graduates of alternative high schools and students who were enrolled in special education. In the analyses that used qualifications, we excluded students enrolled in charter high schools because CCSR does not have their high school transcript data, which is a key part of determining the type of college to which they have access.

While much of the student background data were obtained from the CCSR data archive, we also used student responses to the 2001 (elementary and high school), 2003 (elementary and high school), and 2005 (junior or senior) CCSR student surveys to obtain additional information on students and their families.

In order to track students through the application and enrollment process, we used the 2005 CCSR senior survey, the 2005 and 2006 CPS Senior Exit Questionnaires, and college tracking data from the National Student Clearinghouse (NSC) for 2005 and 2006 graduates.

In the spring of 2005, CCSR senior surveys were sent to 82 high schools, and approximately 54 percent of students in these schools completed the surveys. Students were asked: "What is the highest level of education you plan to complete?"; "What is your primary plan for next fall?"; and, for those who said they planned to continue their education, "What type of school will you attend next fall?" These three questions allowed us to identify students who aspired to attain a four-year degree and determine whether those same students planned to attend a four-year college immediately after graduation from high school.

Second, since 2004, CPS graduating seniors have completed the online Student Exit Questionnaire (SEQ) at the end of the school year. In 2005, the response rate was 93 percent. The SEQ asks students detailed questions about what they plan to do after high school graduation, what colleges they applied to, whether they were accepted to college, and which college they plan to attend. Based on their reports, the SEQ data allowed us to identify the number of colleges they applied to, what types of colleges they reported applying to and were accepted at, which college they planned to attend, and whether they reported completing the FAFSA.

Finally, we used National Student Clearinghouse (NSC) data to identify whether graduates enrolled in college in the fall after graduation and the kinds of colleges they attended. NSC is a nonprofit corporation that began in 1993 to assist higher education institutions in verifying enrollment and degree completion. In 2004, NSC expanded its services to high school districts through its new program, "Success Outcomes." CPS is the first major urban school district to participate in this program and produce reports on its graduates. In

2005, more than 2,800 colleges participated in NSC's enrollment verification program, covering 91 percent of postsecondary enrollment in the United States. At present, most Illinois colleges participate in NSC's enrollment verification program. However, because not all colleges attended by CPS graduates participate in the NSC program, we adjusted our enrollment numbers for this undercount (see Appendix G for how we adjusted our enrollment count). Beginning with the class of 2004, the CPS Department of College and Career Preparation used this data to publicly report the college enrollment rates of CPS graduates.

#### (b) Quantitative Samples

For the quantitative analysis in the section of this report that tracks students in the college application process, we used a reduced sample that draws on the data sources described above. This sample only included students for whom we had all sources of data and who responded to the questions we used to determine whether they had completed steps on the road to college (see table below). Our final sample was further limited to students who aspired to attain at least a four-year degree. Students in this reduced sample had higher ACT scores and unweighted GPAs than their classmates, suggesting that the results in this report are optimistic.

#### (c) Qualitative Data

Case studies and qualitative analysis presented in this report were drawn from a qualitative sample of 105 students in the Chicago Public Schools. We recruited

students as juniors from three CPS high schools. The qualitative data used in this report were primarily based on student interviews. Students were interviewed five times throughout their junior and senior years. Students were interviewed twice during spring of junior year: once before and once after taking the ACT. Students were also interviewed three times during senior year, with careful consideration to the suggested time frame for completing college applications: once in October/November, when students are encouraged to be diligently working on college applications; once in February, when experts suggest that students should be finished with college applications and moving on to applying for financial aid; and finally in May/June, or just before graduation, when students should have made a final decision about the fall. On average, interviews were completed with 95 percent of the sample at each of the five interview cycles. Interviews were then transcribed, coded, and validated for students' participation in the college search, preparation, application, selection, and financial aid application processes. Though analysis here includes only high school data, interviews continued into students' second year after graduation.

The case studies and qualitative analyses also drew on additional sources of data, including classroom observations, teacher interviews, and teachers' assessments of student course performance and college readiness. The teacher comments in the case studies were based on responses to open-ended questions on the teacher assessments. Finally, to paint a comprehensive picture of college-going in CPS, we linked qualitative data to the quantitative sources of data described earlier.

#### (B) QUANTITATIVE SAMPLES

	N	ACT	GPA (unweighted)
All CPS 2005 graduates	17,672	17.0	2.25
Students in all datasets with information on each step towards college enrollment	6,890	17.7	2.46
Students in all datasets with information on each step towards college enrollment, who are not in special education or alternative schools	6,212	18.1	2.49
Final Reduced Sample: Students in all datasets with information on each step towards college enrollment, who are not in special education or alternative schools and who aspire to attain at least a four-year degree	5,194	18.8	2.57

#### (d) Qualitative Sample

The students in our Longitudinal Qualitative Sample roughly reflected the demographic diversity of CPS students. The qualitative sample was gender-balanced (51 percent males, 49 percent females) and reflected the racial/ethnic composition of CPS students (49 percent African American, 47 percent Latino, 2 percent white (Polish), and 2 percent Asian American). Students in the sample lived in different neighborhoods throughout Chicago, entered high school with a range of incoming achievement test scores, and accumulated very different qualifications for college in terms of their grades and ACT scores. Students also participated in a variety of curricular tracks throughout high school. In order to thoroughly understand the outcomes of high-achieving high school graduates, researchers over-sampled students in the International Baccalaureate (IB) program, as well as students taking honors and AP courses. Of the students in our sample, 25 percent participated in the IB program, 25 percent took honors and AP courses, and 50 percent participated in the standard curriculum. Sample retention was high; by the end of the high school interviews, only three students had declined to participate in the study.

#### (e) Qualitative Methods

Case studies, textual analyses, descriptions of the field work high schools, and other information from the longitudinal study presented in this report drew on a qualitative analysis of 105 student cases, each consisting of five student interviews. Each of the case studies shown in the report was representative of a subset of

students identified after an intensive coding process. Cases were coded by a team of six project researchers focusing on four major themes: (1) students' process of searching for and choosing among schools of interest, paying careful attention to whether or not students considered and applied to "match" schools; (2) students' focus on academic preparation for college, such as ACT preparation, course selection, study habits, and work effort in junior and senior year courses; (3) the attention students gave to their college applications, including number of applications submitted, time line for submission, and effort expended on supplementary application materials; and (4) students' understanding of and participation in college finance activities, including their and their families' saving for college, applying for scholarships, filing the FAFSA, and applying for financial aid at their colleges of interest.

Each case went through an extensive process of coding and validation. Cases were coded by one researcher and then validated by a second researcher. Any discrepancies in coding between the two researchers were reconciled as a group by the qualitative research team. Additional consideration was given to students' level of support for postsecondary planning, as well as students' social background, including experience of college-going in their families. Students' academic records were used to determine their qualifications and level of college access using the same rubric used in the quantitative analysis and then coded for students' trajectories on the road to college. Students' outcomes were determined first through their interview responses, and then verified with data from the SEQ and NSC datasets used in the quantitative analysis.

# Appendix B:

### Variables Used in This Report

### Student Background

Concentration of Poverty (Neighborhood Poverty): Based on 2000 U.S. Census information on the block group in which students lived on two reverse-coded indicators: (1) The log of the percentage of male residents over age 18 employed one or more weeks during the year and (2) the log of the percentage of families above the poverty line

Average Education and Occupation Status of Adults (Neighborhood SES): Based on 2000 U.S. Census information on the block group in which students lived on two indicators: (1) The log of the percentage of employed persons 16 years old or older who are managers or executives and (2) the mean level of education among people over 18

Free or Reduced Price Lunch: School reports of whether the student was qualified for free or reduced price lunch

**Student's Nativity:** Graduates' reports from the 2001, 2003, or 2005 CCSR survey of where they were born

Mother's Highest Level of Education: Graduates' reports from the 2005 CCSR survey of their mother/female guardian's highest level of education completed

Mother's Nativity: Graduates' reports from the 2001, 2003, or 2005 CCSR survey of where their mother/female guardian was born

### Student Preparation for College

Applied to 3 to 5 Schools / Applied to 6 or More Schools: Graduates' reports from the 2005 or 2006 Student Exit Questionnaires of the number applications completed

Time Spent Per Week Studying for All Classes: Graduates' reports from the 2005 CCSR Senior Survey of how much time they spend per week studying for their classes

# Appendix C:

# Demographics for Non-IB and Non-AP Students in the Same Schools

#### **Graduating classes of 2003-06**

	IB Students (N=748)	Non-IB in Same Schools (N=12,098)	Advanced AP (N=1,285)	Non-AP in Same Schools (N=6,304)
Male	33%	43%	36%	42%
Female	67%	57%	64%	58%
African American	33%	36%	40%	51%
Latino	35%	44%	23%	24%
White	19%	14%	27%	19%
Asian American	13%	6%	10%	6%
Not Born in U.S.*	24%	29%	18%	19%
Mom Not Born in U.S.*	58%	58%	45%	39%
Mom Does Not Have a Four-Year Degree**	80%	85%	71%	77%
Free or Reduced Lunch	77%	82%	60%	67%
Concentration of Poverty	-0.18	-0.18	-0.38	-0.29
Mean Social Status	0	-0.13	0.36	0.35

<sup>\*</sup> Data from the 2001 or 2005 CCSR Student Surveys

Note: Lincoln Park high school students were not included in any of these numbers.

<sup>\*\*</sup> Data from the 2005 CCSR Student Surveys

# Appendix D:

# Indicators by Programs and Schools

#### Indicators for 2005 and 2006 graduates by program and selective enrollment school

		Selective Enrollment Schools									
	AP (N=1,088)	IB (N=434)	Lincoln Park IB (N=168)	Average SE (N=3,952)	Brooks (N=368)	Jones (N=233)	King (N=159)	Lane (N=1,789)	Northside (N=360)	Payton (N=271)	Young (N=772)
Average 8th-grade ITBS Percentile	73.3	72.6	89.6	80.8	74.0	82.4	71.7	77.0	92.1	87.7	87.9
Average 11th-grade ACT Composite	21.8	21.6	27.8	23.5	20.8	23.4	19.5	22.1	27.9	26.2	25.6
Unweighted GPA	2.9	2.8	3.1	2.8	2.5	2.8	2.6	2.7	3.3	2.8	2.9
GPA	3.8	3.8	4.5	3.3	3.3	3.6	3.0	2.9	4.3	3.7	3.5
Percent of Students Wh	o Have Qual	ifications	That Give	Them Acces	ss to:						
Very Selective Four-Year	44	40	89	35	21	42	8	21	86	57	47
Selective Four-Year	19	17	7	29	22	24	30	35	10	18	33
Somewhat Selective Four-Year	30	35	4	25	35	27	36	30	5	20	17
Nonselective Four-Year	5	5	1	7	16	3	21	10	0	3	2
Two-Year	2	3	0	3	6	3	5	4	0	2	1
Number of Applications	Submitted:										
5 or More	30	31	57	30	40	41	38	14	48	47	36
3 or 4	34	37	22	33	33	33	36	36	28	30	32
1 or 2	31	29	21	32	22	23	20	42	23	21	29
0	5	3	1	5	5	4	5	9	1	2	3
Number of Match Appli	cations Subr	nitted:									
5 or more	9	12	40	13	14	17	18	4	25	24	17
3 or 4	18	20	15	18	31	18	27	11	18	28	20
1 or 2	42	49	36	42	32	43	35	44	42	36	46
0	32	19	9	27	22	22	20	41	15	13	16

Note: These numbers are from graduating classes of 2005 and 2006 and do not include students who were in special education. Schools with AP programs are included only if they had at least 25 students who took at least six honors courses and two AP classes. College enrollment rates were adjusted for CPS graduates who may have attended a college not participating in NSC's enrollment verification program. In this table, students who enrolled in "Special" or "Unrated" four-year colleges were grouped with those who enrolled in "Nonselective" four-year colleges. "Top 6" popular four-year colleges (based on 2005–06 CPS graduates) include: UIC, Urbana, Northeastern, Northern, Chicago State, and Southern Illinois. Students who are labeled as "Above Match" enroll in schools with

selectivity ratings that exceed what they have access to attend. Students who are labeled as "Match" enroll in schools with selectivity ratings that match what they have access to attend. Students who are labeled as "Slightly Below Match" attend schools that are one selectivity category below their access level. In the case of students with only access to a two-year school, those who do not enroll in any college are considered "Slightly Below Match." Students who are labeled as "Far Below Match" attend schools that are two or more selectivity levels below what they have access to attend; in some cases, these students do not attend college at all.

### Indicators for 2005 and 2006 graduates by program and selective enrollment school (continued)

							Selective	e Enrollmen	t Schools		
	AP (N=1,088)	IB (N=434)	Lincoln Park IB (N=168)	Average SE (N=3,952)	Brooks (N=368)	Jones (N=233)	King (N=159)	Lane (N=1,789)	Northside (N=360)	Payton (N=271)	Young (N=772)
College Enrollment in th	ne Fall After	Senior Ye	ar:								
Very Selective Four-Year	17	22	55	21	14	22	11	9	51	36	34
Selective Four-Year	22	20	21	16	13	25	9	15	22	20	18
Somewhat Selective Four-Year	28	25	5	26	39	29	45	24	13	20	25
Nonselective/Special or Unrated Four-Year	8	8	3	10	9	5	11	15	4	6	5
Two-Year	9	7	1	10	7	6	7	17	1	4	5
No College	16	18	14	17	18	14	18	20	9	15	14
Of Graduates Who Went	to a Four-Y	ear Colleg	e, Percent	t Attending (	One of the	"Top 6" C	olleges fo	r CPS Stude	ents:		
	40	41	26	43	35	30	33	52	39	30	42
Percent of Graduates W	ho Enrolled	in:									
Above Match	12	15	5	10	17	16	24	7	4	13	12
Match	27	32	55	31	35	33	28	22	51	41	40
Slightly Below Match	25	22	19	25	22	22	20	30	21	21	21
Far Below Match	36	32	21	33	26	29	28	41	24	25	28

Note: These numbers are from graduating classes of 2005 and 2006 and do not include students who were in special education. Schools with AP programs are included only if they had at least 25 students who took at least six honors courses and two AP classes. College enrollment rates were adjusted for CPS graduates who may have attended a college not participating in NSC's enrollment verification program. In this table, students who enrolled in "Special" or "Unrated" four-year colleges were grouped with those who enrolled in "Nonselective" four-year colleges. "Top 6" popular four-year colleges (based on 2005–06 CPS graduates) include: UIC, Urbana, Northeastern, Northern, Chicago State, and Southern Illinois. Students who are labeled as "Above Match" enroll in schools with

selectivity ratings that exceed what they have access to attend. Students who are labeled as "Match" enroll in schools with selectivity ratings that match what they have access to attend. Students who are labeled as "Slightly Below Match" attend schools that are one selectivity category below their access level. In the case of students with only access to a two-year school, those who do not enroll in any college are considered "Slightly Below Match." Students who are labeled as "Far Below Match" attend schools that are two or more selectivity levels below what they have access to attend; in some cases, these students do not attend college at all.

### Indicators for 2005 and 2006 graduates by IB program

				IB Programs				
	IB (N=434)	Lincoln Park IB (N=168)	Amundsen (N=48)	Curie (N=66)	Hubbard (N=27)	Hyde Park (N=36)		
Average 8th-Grade ITBS Percentile	72.6	89.6	57.8	77.8	78.0	78.2		
Average 11th-Grade ACT Composite	21.6	27.8	19.9	22.4	23.8	21.4		
Unweighted GPA	2.8	3.1	2.8	2.8	3.1	2.8		
GPA	3.8	4.5	3.7	3.7	4.2	3.8		
Percent of Students Who Have Qualification	ns That Give T	hem Access to:						
Very Selective or Selective Four-Year	57	96	42	62	81	56		
Somewhat or Nonselective Four-Year	40	4	54	38	19	44		
Number of Applications Submitted:								
3 or More	68	78	67	78	70	79		
Number of Match Applications Submitted:								
3 or More	32	55	43	44	19	39		
College Enrollment in the Fall After Senior	Year:							
Very Selective or Selective Four-Year	42	77	29	44	56	67		
Somewhat Selective/Nonselective/Special or Unrated Four-Year	33	8	46	35	15	19		
Two-Year or No College	25	15	25	21	30	14		
Of Graduates Who Went to a Four-Year Col	lege, Percent	Attending One of the	"Top 6" College	s for CPS Stud	lents:			
	41	26	58	40	42	29		
Percent of Graduates Who Enrolled in:								
Above Match or Match	46	60	54	53	44	64		

**Note:** These numbers are from graduating classes of 2005 and 2006 and do not include students who were in special education. Data for Austin Community Academy High School were excluded because the school closed in the spring of 2007. College enrollment rates were adjusted for CPS graduates who may have attended a college not participating in NSC's enrollment verification program. In this table, students who enrolled in "Special" and "Unrated" four-year colleges were grouped with those who enrolled in "Nonselective"

four-year colleges. "Top 6" popular four-year colleges (based on 2005–06 CPS graduates) include: UIC, Urbana, Northeastern, Northern, Chicago State, and Southern Illinois. Students who are labeled as "Above Match" enroll in schools with selectivity ratings that exceed what they have access to attend. Students who are labeled as "Match" enroll in schools with selectivity ratings that match what they have access to attend.

### Indicators for 2005 and 2006 graduates by IB program (continued)

	IB Programs								
	Kelly (N=25)	Morgan Park (N=42)	Prosser (N=38)	Senn (N=25)	Steinmetz (N=19)	Taft (N=28)	Washington (N=45)		
Average 8th-Grade ITBS Percentile	69.6	85.0	73.1	64.1	75.9	80.4	71.8		
Average 11th-Grade ACT Composite	21.2	25.1	21.2	23.0	23.0	23.4	20.3		
Unweighted GPA	2.8	3.0	2.8	3.2	2.9	2.6	3.0		
GPA	3.8	4.1	3.8	4.3	3.9	3.7	4.2		
Percent of Students Who Have Qualification	s That Give	Them Access to:							
Very Selective or Selective Four-Year	56	81	50	76	68	57	58		
Somewhat or Nonselective Four-Year	44	19	50	24	32	43	42		
Number of Applications Submitted:									
3 or More	77	66	63	80	63	76	60		
Number of Match Applications Submitted:									
3 or More	32	32	26	36	16	36	24		
College Enrollment in the Fall After Senior Y	ear:								
Very Selective or Selective Four-Year	48	69	21	56	47	54	24		
Somewhat Selective/Nonselective/Special or Unrated Four-Year	16	21	45	16	26	32	51		
Two-Year or No College	36	10	34	28	26	14	24		
Of Graduates Who Went to a Four-Year Colle	Of Graduates Who Went to a Four-Year College, Percent Attending One of the "Top 6" Colleges for CPS Students:								
	56	24	68	28	36	42	44		
Percent of Graduates Who Enrolled in:									
Above Match or Match	44	57	29	44	32	50	36		

**Note:** These numbers are from graduating classes of 2005 and 2006 and do not include students who were in special education. Data for Austin Community Academy High School were excluded because the school closed in the spring of 2007. College enrollment rates were adjusted for CPS graduates who may have attended a college not participating in NSC's enrollment verification program. In this table, students who enrolled in "Special" and "Unrated" four-year colleges were grouped with those who enrolled in "Nonselective"

four-year colleges. "Top 6" popular four-year colleges (based on 2005–06 CPS graduates) include: UIC, Urbana, Northeastern, Northern, Chicago State, and Southern Illinois. Students who are labeled as "Above Match" enroll in schools with selectivity ratings that exceed what they have access to attend. Students who are labeled as "Match" enroll in schools with selectivity ratings that match what they have access to attend.

### Indicators for 2005 and 2006 graduates by AP program

	AP Programs						
	AP (N=1,088)	Bogan (N=49)	Julian (N=42)	Kennedy (N=95)	Kenwood (N=37)	Lake View (N=83)	
Average 8th-Grade ITBS Percentile	73.3	72.0	63.9	68.0	74.9	63.1	
Average 11th-Grade ACT Composite	21.8	20.3	17.7	20.1	23.9	20.2	
Unweighted GPA	2.9	2.9	2.9	3.2	2.9	3.2	
GPA	3.8	3.9	3.7	4.0	3.6	4.0	
Percent of Students Who Have Qualification	ons That Give Th	iem Access to:					
Very Selective or Selective Four-Year	64	43	29	61	81	63	
Somewhat or Nonselective Four-Year	34	53	64	38	19	35	
Number of Applications Submitted:							
3 or More	64	44	88	54	94	65	
Number of Match Applications Submitted	:						
3 or More	27	18	56	17	47	14	
College Enrollment in the Fall After Senio	Year:						
Very Selective or Selective Four-Year	39	18	24	33	59	24	
Somewhat Selective/Nonselective/Special or Unrated Four-Year	37	37	52	28	27	35	
Two-Year or No College	25	45	24	39	14	41	
Of Graduates Who Went to a Four-Year Co	llege, Percent A	ttending One of	the "Top 6" Coll	eges for CPS Stu	dents:		
	40	52	38	41	19	57	
Percent of Graduates Who Enrolled in:							
Above Match or Match	39	33	50	32	51	30	

**Note:** These numbers are from graduating classes of 2005 and 2006 and do not include students who were in special education. Schools with AP programs are only included if they had at least 25 students who took at least six honors courses and two AP classes. College enrollment rates were adjusted for CPS graduates who may have attended a college not participating in NSC's enrollment verification program. In this table, students who enrolled in "Special" and "Unrated" four-year colleges were grouped with those who

enrolled in "Nonselective" four-year colleges. "Top 6" popular four-year colleges (based on 2005–06 CPS graduates) include: UIC, Urbana, Northeastern, Northern, Chicago State, and Southern Illinois. Students who are labeled as "Above Match" enroll in schools with selectivity ratings that exceed what they have access to attend. Students who are labeled as "Match" enroll in schools with selectivity ratings that match what they have access to attend.

### Indicators for 2005 and 2006 graduates by AP program (continued)

	AP Programs							
	Lincoln Park (N=339)	Mather (N=25)	Morgan Park (N=155)	Prosser (N=37)	Steinmetz (N=40)	Taft (N=36)	Von Stueben (N=150)	
Average 8th-Grade ITBS Percentile	74.2	65.5	80.2	67.0	56.8	73.3	82.8	
Average 11th-Grade ACT Composite	22.0	20.7	23.2	20.0	18.3	21.6	24.7	
Unweighted GPA	2.9	2.9	2.8	2.7	2.5	3.0	3.0	
GPA	3.8	3.6	3.6	3.6	3.2	3.9	3.9	
Percent of Students Who Have Qualificati	ons That Give T	hem Access	to:					
Very Selective or Selective Four-Year	66	60	70	35	20	61	87	
Somewhat or Nonselective Four-Year	33	36	30	65	68	39	12	
Number of Applications Submitted:								
3 or More	65	48	69	52	52	47	68	
Number of Match Applications Submitted	:							
3 or More	30	12	29	28	24	8	27	
College Enrollment in the Fall After Senio	r Year:							
Very Selective or Selective Four-Year	43	36	44	14	5	28	59	
Somewhat Selective/Nonselective/Special or Unrated Four-Year	38	32	43	54	38	44	26	
Two-Year or No College	19	32	14	32	58	28	15	
Of Graduates Who Went to a Four-Year College, Percent Attending One of the "Top 6" Colleges for CPS Students:								
	44	53	20	56	47	54	39	
Percent of Graduates Who Enrolled in:								
Above Match or Match	41	32	46	35	25	25	44	

**Note:** These numbers are from graduating classes of 2005 and 2006 and do not include students who were in special education. Schools with AP programs are only included if they had at least 25 students who took at least six honors courses and two AP classes. College enrollment rates were adjusted for CPS graduates who may have attended a college not participating in NSC's enrollment verification program. In this table, students who enrolled in "Special" and "Unrated" four-year colleges were grouped with those who

enrolled in "Nonselective" four-year colleges. "Top 6" popular four-year colleges (based on 2005–06 CPS graduates) include: UIC, Urbana, Northeastern, Northern, Chicago State, and Southern Illinois. Students who are labeled as "Above Match" enroll in schools with selectivity ratings that exceed what they have access to attend. Students who are labeled as "Match" enroll in schools with selectivity ratings that match what they have access to attend.

# Appendix E:

## Models Used in This Report

In the analyses for creating Figures 9A and 9B, we used two-level hierarchical linear modeling, with students at Level 1 and high schools at Level 2.

Our models use the base equation shown below. Each of the independent variables in the model was grand mean centered, except for dummy variables that indicated participation in each type of college preparatory program, in order to allow the intercept to represent the value for an "average" graduate of a CPS selective enrollment school.

The base equation shows both the Level 1 and Level 2 models. In the Level 1 model, Neighborhood Poverty is a measure of the concentration of poverty in the student's census block group; Neighborhood SES is the mean social status, without income of a student's census block group; Male, White/Other ethnic, Latino, and Asian American are dummy variables indicating a student's race/ethnicity (African American is the omitted category) and gender (female is the omitted category); and previous performance in eighth grade is measured by latent eighth-grade test scores.

### **Base Equation**

### Level 1

```
\begin{split} \eta_{ij} &= \text{ unweighted GPA or ACT composite score} \\ \eta_{ij} &= \beta_{0j} + \beta_{1j} \left( \text{Neighborhood Poverty} \right)_{ij} + \beta_{2j} \left( \text{Neighborhood SES} \right)_{ij} + \beta_{3j} \left( \text{Male} \right)_{ij} + \beta_{4j} \left( \text{Latino} \right)_{ij} + \\ \beta_{5j} \left( \text{White/Other Ethnic} \right)_{ij} + \beta_{6j} \left( \text{Asian American} \right)_{ij} + \beta_{7j} \left( \text{Latent 8th grade test scores} \right)_{ij} + \\ \beta_{8j} \left( \text{IB student} \right)_{ij} + \beta_{9j} \left( \text{AP student} \right)_{ij} + \beta_{10j} \left( \text{Lincoln Park IB student} \right)_{ij} + \\ \beta_{11j} \left( \text{Lincoln Park AP student} \right)_{ij} + r_{ij} \end{split}
```

### Level 2

$$\beta_{0j} = \gamma_{00} + u_{j}$$

# Appendix F:

# Description of Selectivity Ratings Used in This Report

Throughout this report, we categorize colleges by their selectivity using categories that are based on *Barron's Profiles of American Colleges*. This college ranking system rates four-year colleges on the academic qualifications of the students that attend the college (e.g., ACT or SAT scores, GPA, and class rank), as well as the percentage of applicants who are accepted. In our analysis, we grouped four-year colleges into four

separate groups based on Barron's ratings: nonselective four-year colleges, somewhat selective four-year colleges, selective four-year colleges, and very selective four-year colleges. This top category, very selective, combines Barron's two top categories ("most competitive" and "highly competitive"). The nonselective category combines Barron's "less competitive" and "noncompetitive" categories.

Ratings Grouping Used in This Report	Barron's Ratings	Barron's Definition					
Name Coloctive	Most Competitive	Admit fewer than 1/3 of applicants.  Average freshman: Top 10% to 20% of high school class; GPA of A or B+; median ACT of 29 or higher.					
Very Selective	Highly Competitive	Admit 1/3 to 1/2 of applicants.  Average freshman: Top 20% to 35% of high school class; GPA of B+ or B; median ACT of 27 or 28.					
Selective	Very Competitive	Admit 1/2 to 3/4 of applicants.  Average freshman: Top 35% to 50% of high school class; GPA of no less than a B-; median ACT between 24 and 26.					
Somewhat Selective	Competitive	Admit 75% to 85% of applicants.  Average freshman: Top 50% to 65% of high school class;  GPA mostly B-, with some C or C+; median ACT between 21 and 23.					
	Less Competitive	Admit 85% or more of applicants.  Average freshman: Top 65% of high school class;  GPA below a C; median ACT below 21.					
Nonselective	Noncompetitive	Students must have graduated from an accredited high school with minimum high school requirements. Colleges with higher than a 98% admittance rate are automatically in this category. Some colleges have no requirements for state residents but some requirements for out-of-state residents. Some colleges require students to take placement examinations to place into college-level courses.					
Other Four-Year College	Not Rated by Barron's	Some four-year colleges, often proprietary schools, were not rated by Barron's.					
Two-Year College	Not Rated by Barron's	All have open enrollment. Students usually must take placement examination to place into credit-bearing courses. Most offer associate's degrees and certificate programs.					
Special	Not Rated by Barron's	These colleges have specialized programs of study and/or are professional schools of art, music, nursing, and other disciplines. Admission usually requires evidence of the talent or special interest. Colleges that serve working adults are also assigned to this level.					

Nonselective colleges in Illinois include Northeastern Illinois University, DeVry University, Columbia College, and Roosevelt University. Somewhat selective colleges include several large public universities such as the University of Illinois at Chicago, Chicago State University, Northern Illinois University, and Southern Illinois University at Carbondale. Selective colleges in

Illinois include DePaul University and Loyola University. Finally, very selective colleges in Illinois include the University of Illinois at Urbana-Champaign, the University of Chicago, and Northwestern University. To provide a broader national context, the table below presents examples of colleges from our selectivity categories for various regions of the U.S.

	Illinois	Midwest, Outside Illinois	Northeast	South	West
Nonselective	Northeastern Illinois University	University of Akron	City University of New York (Staten Island)	University of Texas (San Antonio)	California State University (Northridge)
Somewhat Selective	Chicago State University	University of Nebraska (Lincoln)	University of Massachusetts (Amherst)	Spelman College	California State University (Long Beach)
Selective	DePaul University	Valparaiso University	Hofstra University	University of Georgia	Pepperdine University
Very Selective	Northwestern University	Notre Dame University	Boston University	Duke University	Scripps College

# Appendix G:

# Adjusting for Missing NSC Data

When using data from the NSC, we had to look more closely at the students not enrolled in college because we did not know if these students were in fact enrolled in college but were attending colleges that did not share enrollment data with the NSC. To do so, we first used the NSC website to obtain the list of schools participating in NSC's Enrollment Verification program and when those schools began participating. Next, we used SEQ data to check students' potential for enrolling in college. We focused on a group of students who were not enrolled in college in the fall of 2005 or 2006 but said they planned to continue their education in the fall. We limited this focus to students who named a college they planned to attend *and* reported being accepted into that same college. Of this group of

students, we compared the name of the college the student planned to attend to the NSC participant list. We then flagged students who planned to attend colleges that were not in the NSC participant list as of January after the year of high school graduation.

We used two-year and four-year attrition rates for the students not missing NSC data to estimate the enrollment rates of students in the adjustment group. We determined attrition rates for students of given qualifications by looking at the rate at which students who were accepted into a four-year or two-year college enrolled in a four-year or two-year college. We then applied these attrition rates to students in the adjustment group given their qualifications.

# Appendix H:

# College Access versus College Choice

### 2005 and 2006 graduates of academically advanced programs

### Enrolled in

		Very Selective	Selective	Somewhat Selective	Nonselective	Two-Year	No College	Total (by access)	Percent Match or Above Their Qualifications
Very S	Selective	41%	23%	18%	4%	2%	11%	2,186 (39%)	41%
Sel	lective	16%	21%	33%	8%	7%	15%	1,448 (26%)	37%
	newhat lective	4%	12%	30%	16%	16%	21%	1,481 (26%)	46%
Nons	selective	0%	2%	23%	16%	26%	32%	367 (7%)	41%
Two	o-Year	0%	2%	12%	12%	31%	43%	160 (3%)	57%
	Fotal enrolled)	1,201 (21%)	1,006 (18%)	1,434 (25%)	530 (9%)	526 (9%)	945 (17%)	5,642 (100%)	

Slightly Below Match

**Note:** In this table, students who enrolled in "Special" and "Unrated" four-year colleges were grouped with those who enrolled in "Nonselective" four-year colleges. Students who are labeled as "Above Match" enroll in schools with selectivity ratings that exceed what they have access to attend. Students labeled as "Match" enroll in schools with ratings that match what the students attend. Students labeled as "Slightly Below Match" attend

schools that are one selectivity category below the students access level. In the case of

Above Match

Match

students with only access to a two-year college, those who do not enroll in any college are considered "Slightly Below Match." Students labeled as "Far Below Match" attend schools that are two or more selectivity levels below what they have access to attend, and in some cases these students do not attend college at all. College enrollment rates were adjusted for CPS graduates who may have attended a college not participating in NSC's enrollment verification program.

Far Below Match

# Endnotes

### Introduction

- 1 Throughout this paper, we term "selective enrollment schools" as those high schools that require prospective students to take an entrance exam, although we do not include Phoenix Military Academy. The selective enrollment schools are Martin Luther King Jr. College Preparatory High School, Gwendolyn Brooks College Preparatory High School (previously known as Southside College Preparatory High School), Lane Tech College Preparatory High School, Jones College Preparatory High School, Walter Payton College Preparatory High School, Whitney M. Young Magnet High School, Northside College Preparatory High School, and Lindblom Math and Science Academy. Lindblom is not included in the analyses for this report because it did not have graduates by the spring of 2006. King graduated its first cohort of students in 2006.
- 2 The seventh-grade ISAT is used in the admissions process for selective enrollment schools.
- 3 Kaplan and Newsweek (2006), Newsweek (2007), U.S. News and World Report (2006), U.S. News and World Report (2007a).
- 4 Advisory Committee on Student Financial Assistance (2006). Mortgaging Our Future: How Financial Barriers to College Undercut America's Global Competitiveness (Washington: 2006).
- 5 The Department of Postsecondary Education and Student Development recently changed its name to the Department of College and Career Preparation.

### Chapter 1

- 6 National Research Council (2002).
- 7 Rigol (2003).
- 8 Planty et al. (2006).
- 9 Roderick and Stoker (forthcoming).
- 10 Roderick and Stoker (forthcoming); Jackson (2007).
- 11 U.S. News and World Report Gold Medal Schools ranking (2007b) and Newsweek's Top of the Class 2008 high school rankings.
- 12 These estimates were obtained using data from the *Chicago Tribune* January 17, 2007, article: "More Vying for Chicago's Top Schools: High Test Scores Mean Thousands More Students Are Aiming for the 2,700 Spots at the 8 Elite High Schools," by Tracy Dell'Angela.
- 13 Although not discussed in this report, CPS reopened Lindblom, which is located in Chicago's southern region, in 2005 as a math and science selective enrollment school.
- 14 There are also prospective IB programs in two high schools: Bogan and Clark.
- 15 Schools with at least 25 students in the Advanced AP track are Julian, Kennedy, Kenwood, Lake View, Lincoln Park, Mather, Morgan Park, Steinmetz, Taft, and Von Steuben.

- 16 In comparison to their IB students, AP students at Lincoln Park do not look dramatically different from AP students at other schools. In addition, though Lincoln Park's AP program is large, it does not account for such a dominating percentage of the overall AP population in CPS—as is the case for their IB program. For these reasons, we have included Lincoln Park AP students in the overall AP group.
- 17 The average African American senior lives in a neighborhood with a much higher concentration of poverty—half a standard deviation—than the city average.
- 18 Illinois mandates that all students take the ACT in their junior year. Thus, students who started IB or AP programming in their junior year are less likely to see any value added to their ACT scores.
- 19 National and state ACT scores are reported for the Class of 2006. National statistics were accessed on October 8, 2008, at www. act.org/news/data/06/pdf/National2006.pdf. State statistics were obtained from www.act.org/news/data/06/states.html, which was accessed on April 23, 2008.
- 20 Charter schools are not included in the "CPS Average" because the Consortium's data archive does not include their high school transcripts.
- 21 Students in the "Selective" category who are either in an IB program or have taken at least two AP and at least six honors courses are moved up to the "Very Selective" category if they had GPAs of 3.0 or above or ACT scores of 24 or higher. We analyzed the actual acceptance and enrollment patterns of CPS graduates; we recategorized these students to better reflect the qualifications needed to have access to very selective colleges and how, in addition to ACT scores and grades, colleges consider the rigor of students' coursework in their admissions decisions.

### Chapter 1 Sidebars

- A Allensworth and Rosenkranz (2000).
- B Kelleher (2001); Martinez (1999); Rossi (2000); Rossi (2001).

### Chapter 2

- 22 See Appendix A for a description of the data used in this report.
- 23 All names of students throughout our report and case studies are pseudonyms.
- 24 Descriptions of the college search, application, and selection time line used in this chapter draw from a review of advice found on commonly used college planning tools and websites, including the Department of College and Career Preparation at CPS (www.postsecondary.cps.k12.il.us/do\_it\_now); College Board (www.collegeboard.com/student/plan); Barron's Profiles of American Colleges (2005); and Education Planner/Education Timeline (www.educationplanner.com).

- 25 Kao and Tienda (1998); Avery and Kane (2004).
- 26 Avery, Hoxby, Jackson, Burek, Pope, and Raman (2006); De La Rosa (2006); Dynarski and Scott-Clayton (2008); U.S. Department of Education (2006).
- 27 McDonough (1997); Plank and Jordan (2001); Avery and Kane (2004); Kirst and Venezia (2004).
- 28 In response to the Hopwood decision, which eliminated the use of race or ethnicity in college admissions decisions in Texas, the state implemented a policy in 1997 known as the "Top Ten Percent Law," which guarantees that all Texas seniors who graduate in the top 10 percent of their class can gain admission to any public college in Texas.
- 29 "Ten or more hours" per week was the highest category on the CCSR survey.
- 30 U.S. Department of Education (2006).
- 31 Brandon (2006).
- 32 Arenson (2004).
- 33 Newbart (2007).
- 34 Dynarski and Scott-Clayton (2007).
- 35 Horn, Chen, and Chapman (2003); Avery and Kane (2004); Grodsky and Jones (2006).
- 36 Kane (1999); Advisory Committee on Student Financial Assistance (2002, 2006).
- 37 ACE (2004).
- 38 This data was shared with us by the CPS Department of College and Career Preparation for the graduating class of 2008. CPS receives verification of students' FAFSA filing from the Illinois Student Assistance Commission within two weeks after the date at which it was submitted. FAFSA filing is tracked only for students with valid social security numbers. When CPS reports these numbers, they categorize academically advanced students in slightly different ways than we have throughout this report. IB students are defined by CPS as students who took at least 9 IB courses in schools that had IB programs—including Lincoln Park—and AP students are defined as students who took two or more AP courses in any high school in CPS—including selective enrollment schools—regardless of participation in honors coursework.
- 39 Gryphon (2005).
- 40 Gong, Presley, and White (2006).
- 41 Goldrick-Rab, Pfeffer, and Brand (forthcoming).
- 42 Muraskin, Lee, Wilner, and Swail (2004).

### Chapter 2 Sidebars

- C All names of students, high schools, and programs in the case studies in this report are pseudonyms.
- D For more information on how the qualitative study was conducted, see Appendix A: Data Used in This Report.
- E Both students' ACT scores placed them above their minority counterparts who graduated with high class ranks. The ACT

- average score is 19.2 for African American students and 20.9 for Latino students who graduated in the top quarter of their class in 2005. See ACT 2005 National Score Report, Data Tables at www.act.org/news/data/05/pdf/t1-2.pdf.
- F Although Moises and Grady appear to have an excellent understanding of financial aid and the aid packages offered to them by different schools, it is important to note that all reports of financial aid packages in the case studies in this report are based on student reports only and might not reflect the actual aid package offered to a student by his or her prospective college.
- G In some cases, such as that of Moises, revealing a student's college choice would compromise his anonymity. College choice is kept confidential in these cases.
- H All names of students, high schools, and programs in the case studies in this report are pseudonyms.
- All reports of financial aid packages in these case studies are based on student reports only and might not reflect the actual aid package offered to a student by his or her prospective college. Jennie, for example, might not have actually properly filed her FAFSA, making it unclear what the \$10,000 in loans actually refers to.
- J All names of students, high schools, and programs in the case studies in this report are pseudonyms.
- K In some cases, such as that of Clara, revealing a student's college choice would compromise her anonymity. College choice is kept confidential in these cases.
- L All reports of financial aid packages in these case studies are based on student reports only and might not reflect the actual aid package offered to a student by his or her prospective college. Clara, for example, appeared to have figured out the financial aid process well enough between her winter and spring interview to leverage a strong aid package from her school, though she wasn't able to recall specific numbers.
- M The Common Application collects personal data, academic history, academic honors, extracurricular and volunteer activities, and work experience. Students provide a short answer that describes in 150 words "one of your activities." And, students complete a 250 word personal essay. Students can either choose their own topic or choose from topics provided such as, "Evaluate a significant experience, achievement, risk you have taken or ethical dilemma you have faced and its impact on you."
- N Rimer (2007).
- O The College Board website does not provide an estimate for the cost of room and board for students attending Northeastern Illinois University and living on-campus. In this case, we use estimates for a student commuting to campus but not living at home. The College Board estimates the total cost of attendance—including room and board—for a student living at home to be \$17,352. In this scenario, a student with an EFC of \$0 would hypothetically be left with \$7,461 in unmet need.



### **About the Authors**

The Chicago Postsecondary Transition Project is a sponsored project of CCSR at the University of Chicago and is based at the School of Social Service Administration.

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This report reflects the interpretation of the authors. Although the Consortium's Steering Committee provided technical advice and reviewed earlier versions, no formal endorsement by these individuals, organizations, or the full Consortium should be assumed.

This report was produced by the Consortium's publications and communications staff.

Editing and project management by Publications & Creative Services Graphic design by Jeff Hall Design Photos by David Schalliol

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The Consortium on Chicago School Research (CCSR) at the University of Chicago conducts research of high technical quality that can inform and assess policy and practice in the Chicago Public Schools. We seek to expand communication among researchers, policy makers, and practitioners as we support the search for solutions to the problems of school reform. CCSR encourages the use of research in policy action and improvement of practice, but does not argue for particular policies or programs. Rather, we help to build capacity for school reform by identifying what matters for student success and school improvement, creating critical indicators to chart progress, and conducting theory-driven evaluation to identify how programs and policies are working.



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